12.—*Contributions to the South African Arachnid Fauna. II.—On Some New South African Spiders of the Families Barychelidae, Dipluridae, Eresidae, Zodariidae, Heracliidae, Urocteidae, Clubionidae.*—By R. W. E. Tucker, B.A., *Assistant.*

(With Plates XXVIII and XXIX.)

Family CTENIZIDAE.

Gen. IDIOPS, Perty.

Idiops pullus, Tucker.

I. pullus, Tucker in Ann. S. Afr. Mus. vol. 17, 1917, p. 88, text-figs. 2 a and b.

In the original description the following amendments should be made :

Carapace.—Equal to or slightly exceeding in length metatarsi I and IV.

Eyes.—Anterior medians large, circular, and less than a diameter from each other. Anterior laterals about 1½–2 diameters from the anterior medians.

Tarsi.—Tarsus I with a few fine spinules down the centre.

An additional specimen of this species is now to hand from Kimberley. 1 ♂ (B. 4185) (Bro. J. H. Power).

This specimen is larger than the type, and presents the following variations; the palp, tibia I and the majority of other characters, however, are identical with the type.

Colour.—Carapace brownish-red; abdomen black dorsally, legs reddish distally.

Carapace.—Bearing more conspicuous setose hairs than in the type. Length equal to metatarsus IV, but subequal to metatarsus and to ½ the tarsus of the 1st leg.

Chelicera.—With 5 teeth on each side of the groove.

Legs.—Metatarsus I with 2 spines down the inner side. Spinules on patella III scanty and scarcely distinguishable from the stouter hairs. Spinules on patella IV confined to 3 or 4 at the base of the anterior band of bristles.

Measurements.—Length of carapace 7 mm.; width 6·1 mm.; chelicera to end of abdomen, 17 mm.; 1st leg 27 mm., 4th leg 26 mm. long.

These differences again illustrate the amount of variation in size and spination, etc., according to the locality of the specimen.

FAMILY BARYCHELIDAE.

GEN. DIPLOTHELE, Cambr.

DIPLOTHELE MACEQUECE, n. sp.

Specimens.—1 ♀ (No. B 2648, Type), from forest on Vengo Mts., Macequece, Portug. E. Africa (Major Conolly, 10/16).

Colour.—Darker than *D. arcturus*, Tucker (Ann. S. Afr. Mus., vol. 17, p. 118, 1917); carapace dark brown with radiate infuscations and sparse scattered hairs; abdomen dark above, no spots being apparent in its wrinkled condition; ventral surface slightly lighter. Sternum and coxæ medium golden brown; legs dark brown with olivaceous infuscations.

Carapace.—Equal in length to tibia, metatarsus and tarsus of 1st leg, and subequal to patella, tibia and metatarsus of 2nd leg (in *arcturus*, length equals patella, tibia, and $\frac{3}{5}$ metatarsus of 2nd leg); 4th legs missing. Fovea well marked, straight, and nearly as wide as the ocular tubercle. Ocular area much wider than long.

Eyes.—Anterior laterals situated on anterior edge of carapace and separated by more than their own long diameter; equal or subequal in area to the anterior medians; the latter less than a diameter apart, and about a diameter behind the anterior laterals. Posterior laterals long, oval and slightly smaller than the anterior laterals; posterior medians small and nearly touching both anterior medians and posterior laterals.

Sternum.—Longer than broad (breadth slightly exceeds $\frac{3}{4}$ length). Sigilla as in *arcturus.*

Labium.—Not quite twice as wide as long and bearing 1–2 teeth. Coxae of pedipalps with 8–12 teeth.

Chelicera.—Bearing no rastellum; bristles weaker than *arcturus,* dentition similar.

Legs.—Anterior tarsi with no clavate hairs on upper surface. Setal band on tarsi very faint. Metatarsus II with 1 strong spine on under surface basally. Other legs missing.

Pedipalps.—Scopula of tarsus divided by a weak line of setae; tibia with 2 weak apical spines on under surface.

Vulval plate with a pair of round dark marks showing near posterior lip centrally.

Measurements.—Chelicera to end of abdomen 13·5 mm. Carapace 6 mm. long, 5 mm. wide.

A small subadult ♀ from the same locality appears to be a different species from the above.

FAMILY DIPLURIDAE.

The specimens identified by Dr. Purcell in Ann. S. Afr. Mus., vol. 3, p. 106, 1903, should not have been referred to *Thelechoris* as defined in Hist. Nat. des Araign., p. 187, since on examination the type specimen of *T. australis*, Purc., does not agree with the description of that genus. Hence my conclusion (Ann. S. Afr. Mus., vol. 17, p. 119, 1917), based on the type ♀ of *australis*, that the ♂ of this species of *Thelechoris* proved that *Thelechoris* was not synonymous with *Ischnothele*, is no longer valid. *Thelechoris* and *Ischnothele* are synonymous, as stated by Simon. Neither are the specimens in question referable to *Evagrus*, from which genus they appreciably differ. Hewitt points out (Ann. Durb. Mus., vol. 1, pp. 132–3) that *Evagrus caffer*, Poc., and *T. australis*, Purc., undoubtedly belong to the same genus, which is not *Evagrus* and cannot be *Ischnothele* (*Thelechoris*); hence, as he suggests, it is advisable to create a new genus, for which I propose the name *Allothele*.

The principal differences between *Evagrus* and *Allothele* are that in *Evagrus* (following Ausserer's description) the spinners are shorter than the abdomen; the 1st and 2nd pairs of legs are stouter in build than the remainder; tibia I is swollen and armed below and partly also on the inside with numerous very strong long spines; tibia II is short and very thick with a projecting tubercle on the inside, on the end of which are 3 very long spines; also numerous shorter spines on saddle-shaped depression, on the outside; metatarsus II has two projecting tubercles below, the larger on the inside, in the upper quarter, the smaller outside in the upper third; from both there runs a sharp keel down the length of the metatarsus.

These and other characters distinguish *Evagrus* from the following:

GEN. ALLOTHELE, n. gen.

Cephalothorax moderately convex, one-fifth longer than broad; fovea slightly recurved. Ocular tubercle at least twice as broad as long in ♀; anterior lateral eyes a short diameter from the anterior border of the carapace. Anterior row of eyes strongly procurved, medians round and smaller than the oval laterals. Posterior row practically straight; medians smaller than the anterior medians, long oval, and touching the laterals, which are considerably larger, but themselves a little smaller than, and narrowly separated from, the anterior laterals. Sternum slightly longer than broad; labium less than twice as broad as long, rounded apically and muticous. Chelicera with teeth on inner border only. Legs moderately long and robust; tibiae of 1st two pairs not thickened in ♀ and only slightly in 2nd legs of ♂; order of legs in ♂ 4, 3, 2, 1, in ♀ 4, 3, 1, 2. Tarsi not scopulate, claws with a single row of 5–7 teeth in ♂ and 8–10 in the ♀. Abdomen dark, without stripes or lighter marking as in *Ischnothele.* Superior spinners keeled on the under surface; longer than the abdomen, considerably longer than the carapace, and resembling those of *Ischnothele.* Tarsus of ♂ palp short; palpal organ piriform, elongate, curved, and reaching beyond the tibia. First leg normal; 2nd leg bearing on the under surface of the tibia a median projection curving upwards and armed with 2–3 teeth; tibia considerably longer than broad; metatarsus bearing a small sub-basal tubercle, armed on the side or base with a stout spine.

On examination of the types of *E. caffer*, Poc., and *T. australis*, Purc., they appear to be identical and to belong to the genus Allothele. Thus the specimens referred by me in Ann. S. Afr. Mus., vol. 17, p. 120, to *T. australis*, now become *Allothele caffer.*

The ♀♀ unfortunately appear to lack clearly defined specific characters, and in the absence of the ♂♂ cannot with certainty be separated into species; size and markings vary to a certain extent, but the relative proportions do not vary sufficiently or with the necessary constancy to be specific. The eyes also vary, but only the ♀♀ from Cookhouse (B 2402) seem at all distinct; in these specimens the median eyes are very small, also the abdomen is flecked (in alcohol) with numerous lighter spots; provisionally they are classed as *A. australis*, though with the advent of the ♂ they will most probably prove to be a distinct species.

The following species could only be separated from *A. australis* on the ♂ characters.

Allothele teretis, n. sp. (Plate XXVIII, figs. 1 a–c).

Specimens.—1 ♂, 2 ♀♀, and 2 juv. (4021, Types), M'fongosi, Zululand (W. E. Jones, 2/18).

♀. *Colour.*—Carapace medium to dark brown, with darker border and mottling; legs similar in colour; abdomen unrelieved purple-black on the dorsal surface; spinners lighter, each segment dark rimmed apically; under surface slightly lighter.

Carapace.—Equal to tibia, metatarsus and ½–⅔ tarsus I, and to metatarsus and tarsus IV. Radiating stria from transverse fovea moderately deep.

Eyes.—Anterior row procurved so that a line tangential to the bases of the medians would barely cut the upper borders of the laterals. Medians small, round, about ⅔ of a diameter apart, slightly nearer to the laterals, which are large, and broadly oval. Posterior medians small, long oval and touching the laterals, which are smaller than the anterior laterals and close to them. Anterior eyes about ½ a short diameter from the anterior border of the carapace.

Chelicera.—Bearing 9–11 large and small teeth on the inner border of the groove; base of the groove furnished with about 20 denticles irregularly placed.

Sternum.—Bearing 3 faint sigilla, opposite coxa I, and approximately opposite the junctions of coxae 2 and 3 and 3 and 4 respectively.

Legs.—Tarsi and metatarsi without scopulae. Tarsal claws long and bearing a single row of about 10 teeth which become smaller and denser basally; the small lower tarsal claw is also toothed. Anterior tarsi with 1 or 2, and posterior tarsi with 3 or 4 spines; legs otherwise bearing long spines and long stout hairs. Order of legs 4, 3, 1, 2, the difference in length between 1 and 2 being slight.

Spinners.—Longer than the abdomen and considerably longer than the carapace; keeled on the under surface; the under surface is also flecked with white spots, in the centre of each of which is a spigot.

Measurements.—Carapace 4·9 mm. long, 3·9 mm. wide. Abdomen 5·7 mm. in length, spinners 6·5 mm.

♂. *Colour.*—Slightly lighter than the ♀.

Carapace.—As long as metatarsus IV, and equal to metatarsus and tarsus I. *Cf. australis.*

Eyes.—As in ♀ save that the anterior medians are a little nearer to each other than to the laterals; the latter are also nearly their short diameter from the anterior margin of the carapace.

Chelicera.—Inner border with 11 large and small teeth; base of groove with a line of 5 denticles and a number of minute spinules.

Sternum.—With 3 sigilla.

Legs.—In order 4, 3, 2, 1; the difference between 2 and 3 is slight. Tarsi not scopulate, but bearing spines; metatarsi and tibiae heavily spined. First leg normal; metatarsus and tibia of 2nd leg as in

Plate XXVIII, fig. 1 c; tibial projection lower down than in *australis* and bearing 2 teeth only.

Pedipalps.—Tibia, tarsus and palpal organ as in figs. 1 A and B. Palpal organ longer and more slender than in *australis.*

Spinners.—Mutilated.

Measurements.—Length of carapace 3·7 mm.; total length 8·5 mm. Length of 4th leg 12·9 mm., 3rd leg 11 mm., 1st leg 10 mm.

GEN. ISCHNOTHELE, AUSS.

ISCHNOTHELE CASSETTI, n. sp.

Specimens.—One ♀ (B 4666, Type), Pemba, N. Rhodesia (Fr. Cassett, 8/19).

Colour.—Carapace dull brown, lighter laterally and posteriorly; legs lighter brown than the carapace; abdomen dull black, dorsal surface with about 4 inconspicuous patches of white hair; sternum, coxae, etc., medium brown.

Carapace.—As broad as long; length equal to tibia, metatarsus and $\frac{1}{3}$ tarsus I, and to metatarsus and $\frac{1}{2}$ tarsus IV; fovea slightly procurved at the bottom.

Eyes.—Anterior medians round, a radius apart and more from the laterals; laterals close to the anterior border of the carapace, long, oval and equal or subequal in area to the medians. Posterior row straight to procurved; medians small and flat, almost touching the laterals, which are smaller than the anterior laterals.

Labium.—At least twice as broad as long; apex with a very few minute pale denticles.

Maxillae.—With an area of sharp denticles stretching along the anterior portion from the base to $\frac{2}{3}$ of the length.

Sternum.—As long as broad, and with 3 distinct sigilla on each side.

Chelicera.—Outer margin with 8 teeth and 4 smaller ones basally on the inside of the row of 8; also 1 small tooth more towards the centre of the groove; inner row with 6 large teeth.

Spinners.—Equal in length to tibia, metatarsus and $\frac{2}{3}$ tarsus IV.

Legs.—In order 4, 3, 2, 1; clothed with long hairs, bristles, and moderately well spined; tarsi not scopulate, but bearing bristles and fine spines, which are stouter on the posterior legs.

Measurements.—Length and breadth of carapace 6 mm.; total length (carapace and abdomen) 15 mm.; spinners 10 mm.; legs 18, 15·7, 14, 13·3 mm.

FAMILY ERESIDAE.

GEN. ERESUS, Walck.

ERESUS PURCELLI, n. sp. (Plate XXIX, fig. 1).

Specimens.—One ♀ (No. B 2435, Type), E. London (Dr. W. F. Purcell, 9/05).

Colour.—Cephalothorax almost black, becoming redder posteriorly, and with a light border above the pedicel; chelicera black, legs reddish-brown in colour, posterior ones slightly lighter, anterior ones darker distally. Abdomen dull testaceous in colour, and with short scanty hairs only; no white rings round dorsal stigmata; under surface infuscated around spinners. Sternum dark red brown, coxae and under surface of legs slightly lighter.

Cephalothorax.—Surface clothed with appressed dark hairs; punctate, but not spined. Length equal to patella, tibia and metatarsus of 1st leg, and very slightly exceeding tibia, metatarsus and tarsus; width equal to patella and tibia, and slightly exceeding metatarsus and tarsus of 1st leg; also reaches from fovea to hind margin of posterior median eyes. Cephalic portion raised, but not abruptly, above thoracic portion, both being approximately equal in width.

Eyes.—Posterior medians large; about $1\frac{1}{4}$ diameters apart, and about 2 diameters from the anterior laterals; otherwise as in *E. namaquensis* (Purc.).

Sternum and chelicera spineless.

Legs.—Without spines on coxae or femora, or on patellae of anterior legs, but clothed with long hairs as in *E. namaquensis.*

Pedipalps.—With some long bristle-like spines on inner and under surfaces of tarsus; otherwise spineless.

Vulva.—As in Plate XXIX, fig. 1.

Measurements.—Total length 17·5 mm. long. Carapace 6 mm. long and 4 mm. wide. Though only one specimen is available for description, the species has been founded since the lack of spines on the under surface of femora, coxae, etc., of 1st two pairs of legs, and from the sternum and carapace is apparently unusual in the S. African species of this genus.

ERESUS DEPRESSUS, n. sp. (Plate XXIX, fig. 2 A–B).

Specimens.—Numerous ♀♀ from Hanover and neighbouring localities (Types, No. 12852). Collected by Mr. S. C. Cronwright

Schreiner (♀♀ Sept. to Jan., Cocoon in Dec.) Also 2 ♂♂ from the same locality.

The ♀ of this species was named but no description published by Purcell.

Colour.—Carapace red-black, clothed with dark hairs with a somewhat rufous sheen; chelicera reddish-black, legs slightly browner than carapace, and similarly clothed; posterior legs slightly lighter; anterior legs darken and become redder distally. Abdomen dull to infuscated testaceous sometimes, slightly mottled with lighter spots; dorsal stigmata white-ringed. Upper surface clothed with blackish and white hairs; the latter, as in *E. fumosus*, forming a number of white spots on dorsal surface and short lines on lateral surfaces. Sternum, coxae, etc., dark to medium brown.

Cephalothorax.—Comparatively flat (fig. 2 B) and slopes gradually to posterior border, with no abrupt grade between cephalic and thoracic portions as in *E. fumosus*. Thoracic portion only very slightly wider than cephalic portion, latter not spined, even at anterior sides, but furnished with stout bristles, often short or broken, and having a spinose appearance. Length of carapace subequal to patella, tibia and metatarsus, and equal to or barely exceeding tibia, metatarsus and tarsus of 1st leg. Width slightly less than from fovea to hind margins of posterior median eyes, and equal to tibia and $\frac{2}{3}$ metatarsus and to patella and tibia of 1st leg.

Eyes.—Posterior medians of medium size, and $1\frac{1}{2}$–2 diameters apart (sometimes only 1 diameter apart or more than 2), and much less than 3 diameters from anterior laterals; anterior medians with their centres about on a line joining the anterior borders of the posterior median eyes.

Sternum and coxae without spinules and clothed with moderately long hairs.

Legs.—Femora of 1st and 2nd legs with numerous fairly long spinules on under surface as well as long hairs; 3rd and 4th femora with a clothing of long hairs but no spinules below. Patellae of anterior legs without spinules.

Pedipalps.—With long fine spines distally on inner and under surface of tarsus and on inner side of tibia; femur with some long and short bristles on the under surface, but with no spinules.

Vulva as in Plate XXIX, fig. 2 A. Dark inner portion of lateral depression larger than in specimen depicted.

Measurements.—Total length 15 mm.; carapace 5·5 mm. long and 3·4 mm. wide (ratio of length to width usually about 1·6 : 1; in *fumosus* it is generally 1·4 : 1).

Specimens.—1 ♂ (No. 14479), Poortjesfontein, Hanover (Master Neser, 1905). 1 ♂ (No. 9463), Hanover (S. C. Schreiner, 10/01).

♂. *Colour.*—Carapace orange-red; legs and palp yellowish-brown, anterior legs very slightly darker distally. Abdomen infuscated dull testaceous, darker on under surface. Sternum dark brown, coxae and under sides of legs pale brown. Legs and abdomen clothed with yellowish hairs, with whitish ones intermingled.

Carapace.—Cephalic portion very slightly raised, but not more so than thoracic portion (in specimen from Poortjesfontein the cephalic portion appears lower, and is separated from the thoracic by a faint line across the fovea); both clothed with scanty whitish hairs, those immediately anterior to fovea being yellowish in colour. Proportion of carapace to legs as in *E. fumosus.*

Eyes.—Posterior medians 2 diameters from each other and from anterior laterals; centres of anterior medians slightly below the line joining anterior borders of posterior median eyes; otherwise as in *fumosus.*

Sternum, legs, etc., without spinules.

Legs.—Metatarsus I without spines at apex on under surface; metatarsus II with 1–2, and metatarsi III and IV with about 2 spines apically on under surface.

Pedipalps.—As in *E. fumosus* (Plate XXIX, fig. 3), save that in the Poortjesfontein specimen, seen from below, the internal outer side of the palpal organ appears swollen and crowded into the inner side; in the Hanover specimen the portion "a," which in the former is crowded into the top right-hand corner, is scarcely visible at all, but, as in the former also, the portion "b" appears enlarged over the lower surface.

Measurements.—Total length 5·5 mm.; carapace 2·8 mm. long and 1·7 mm. wide. No. 14479 was slightly larger, being 6·5 mm. long and 2·9 and 1·8 mm. in carapace.

ERESUS ECHINATUS, Purc.

1908. *Eresus echinatus*, Purcell in Schultzes Reise, Zool. Bd. 1, Denksch. med.-natur. Gesell. vol. 13, ♀, p. 223, Jena.

Specimens.—1 ♀ (No. 14426), from Namaqualand (G. Alston, 1905).

This example, though much larger than that described by Dr. Purcell, agrees with the type-specimen and description, with the following slight differences: Width of cephalothorax equal to tibia and metatarsus, and to patella, tibia and metatarsus of 1st leg; also reaches from fovea to a point half an eye's diameter from the posterior median eyes. The latter are nearly 2 diameters apart, and at least or over 3 diameters from the anterior laterals.

Measurements.—Total length 21 mm.; length of cephalothorax 10 mm., width 7 mm. A ♀ specimen (No. 14666) from Pokwani, though sub-adult, seems referable to this species. The species is also recorded from Kimberley.

ERESUS FUMOSUS, Koch (Plate XXIX, figs. 3 and 2c).

1837–9. *E. fumosus*, C. Koch, Arach. vol. 4, p. 100, f. 314. Type ♀.
1864. *Eresus* (*Eresa*) *fumosa*, Simon, Hist. Nat. Araign. p. 300. ♀.
1865. *E. bubo*, L. Koch, Verh. Zool. bot. Ges. Wien, Bd. 15, p. 878. ♀.
1907. *E. fumosus*, Strand, Zool. Jahrb. Jena. Abt. F. Syst. vol. 5, 25, p. 564. ♀.
1908. *E. fumosus*, Purcell in Schultzes Reise, Zool. Bd. 1, ♀. Jena. Denkschr. Med. Ges. v, 13, p. 222.

Specimens.—♂ (No. B 1600) from Naauwpoort, near Hanover (Dr. W. F. Purcell, 10/05).

Colour.—Carapace dark, black-red; legs and palp slightly lighter and browner. Abdomen infuscated testaceous, slightly darker on under surface and sparsely covered with short whitish hairs and longer darker ones; dorsal sigilla white ringed, and posterior to sigilla are 4–5 light oblique markings sloping down from central line. Sternum, coxae, etc., dark brown; legs covered with pale hairs having a whitish sheen.

Carapace.—Well but not abruptly arched anterior to fovea (*cf.* Plate XXIX, fig. 2c, ♀); also slightly arched posterior to fovea, thus leaving a more level, fan-shaped area on each side from fovea to border. Surface finely granular and covered in centre with dull olivaceous hairs, which become lighter and whiter anteriorly on ocular area, and posteriorly to fovea; apparently with no spines but with some short stout bristles. Carapace equal in length to patella, tibia and $\frac{1}{5}$ of metatarsus, and subequal to tibia and metatarsus of 1st leg; also equal to tibia, metatarsus and $\frac{1}{2}$ tarsus of 4th leg. Width equal to distance from fovea to hind margins of posterior median eyes, and equal to metatarsus and $\frac{1}{4}$ of the tarsus, and to patella and $\frac{1}{2}$, or slightly more, of tibia of first leg. Thoracic portion broader than cephalic.

Eyes.—Posterior medians about $1\frac{1}{2}$ diameters apart, and about 2 diameters from anterior laterals. Centres of anterior medians on or slightly below a line joining lower margins of posterior median eyes; posterior laterals slightly nearer together than anterior laterals. Ocular area not quite 3 times as wide as long.

Sternum and coxae of legs spineless, but former with stiff bristles anteriorly.

Legs.—Femora and patellae of anterior legs spineless but clothed with moderately long stiffish hairs (often the criss-crossing of hairs at their bases produces the appearance of short spinules mixed with them). Metatarsi with a few apical spines on under surface; 1st leg with 1–3, 2nd and 4th with 4–6, and 3rd with 7–8. Dorsal claws on 4th leg with 7–8 teeth in a single row, basally; distal ones long, basal ones short and fine.

Pedipalps.—Palpal organ as in fig. 3; resembling a coiled spring in appearance, the terminal hair-like process of which is apparently inserted round the hollow interior of the crescent-shaped projection shown in the diagram of palp, and is often found subsequently coiled round in the interior vaginal convolution of the ♀ vulva, and with the broken end projecting exteriorly.

Abdomen.—With two small oval plates above genital aperture.

Measurements.—Length 10·6 mm.; carapace 5 mm. long, and 3·1 mm. wide.

It may be noticed that at Hanover two species of Eresidae are found, namely *E. fumosus* and *E. depressus*; the latter is distinct in size, disposition of spinules, and to a slight extent is lighter in colour, and has the cephalic region of the carapace much less prominently raised than in *fumosus.*

Several ♂♂ also from Hanover show rather less distinctive features than the ♀♀; there are no spinules, and, as in the ♀♀, the proportion of the carapace to the legs and the appearance of the sexual organs are much the same. As however the two forms, namely, large and dark and with arched cephalic region on carapace, and small, light, and with flattened carapace, are present in the ♂♂ as in the ♀♀, the first-mentioned forms have been assumed to be *fumosus* and the latter *depressus*; in the latter case there is also a very slight difference in the palpal organ.

Although the two species are distinct around Hanover, what are apparently intermediate forms occur elsewhere, as at Graaff Reinet (No. 12571, ♂, ♀ and juv.).

Around the Cape districts specimens resembling *E. echinatus* occur, but differ in colour in that the upper surfaces of the legs, especially patellae and tibiae, are paler than the under surfaces, and in some cases are even light yellow in colour; these may be newly moulted and insufficiently hardened specimens, although adult. The same may be the case with a ♂ from the Cape Province (no exact locality) which has soft pale legs—anterior tarsi and metatarsi hardened and darkened—and which may belong to these ♀ ♀ but has no differences from *E. fumosus*, apart from colour.

It may be that the Cape specimens form a species of their own, but the differences from *E. fumosus* and *E. echinatus* are comparatively slight, and the variations which occur in the specimens make it advisable to leave their identity an open question.

A ♂ (No. 1207) from Bergvliet, Cape Flats, has the palpal organ exactly as in *fumosus*, but the cephalic portion of the carapace not so much raised (thus resembling *depressus*), and is as indecisive as the Graaff Reinet specimen.

Key to Species.

The South African *Eresidae* adequately described can be identified as follows:

I. Spinules on sternum, coxae, and femora of anterior legs, and on sides of carapace.

(*a*.) Sternum thickly covered with minute, sharp spinules; coxae and femora I and II densely spinulose; coxae and femur III slightly less so. Patellae I and II densely but shortly spinulose on anterior side.

(*a'*.) Large, dark in colour, and with cephalic portion of carapace well raised above thoracic . . . *E. fumosus.*

(*b*.) Sternum with a few scattered spinules anteriorly, and hairs thickening at base anteriorly. Coxae I and II with a few appressed spinules on anterior and posterior surfaces; femora I and II thickly covered below with spinules, III less so. Patellae without spinules.

(*b'*.) Medium size, dark in colour, and with cephalic portion of carapace well raised above thoracic . . *E. echinatus.*

(*c*.) Sternum with no spinules, but with hairs thickening slightly at base anteriorly; no spinules on coxae, patellae, or carapace; spinules and long hairs on femora I and II, long hairs only on III.

(*c'*.) Medium size, moderately light in colour, and with cephalic portion of carapace only slightly and gradually raised above thoracic . . . . . . *E. depressus.*

II. No spinules on sternum, legs, or carapace.

(*a*.) Carapace less than tibia, metatarsus and tarsus of 1st leg; cephalic portion depressed, flattened, scarcely raised above thoracic portion, and narrower than latter *E. namaquensis.*

(*b*.) Carapace slightly exceeding tibia, metatarsus and tarsus of 1st leg; cephalic portion raised, but not abruptly, above thoracic portion, and both approximately equal in width *E. purcelli.*

GEN. ADONEA, Sim.

ADONEA VARIEGATA, Purc.

1904. *Adonea variegata*, Purc. Tr. S. Afr. Phil. Soc. 15, p. 137, ♀.
1908. ,, ,, ,, in L. Schultzes Reise, Zool. Bd. 1, Jena. Denkschr. med.-natur. Gesell. vol. 13, p. 219, ♀.

Specimens.—♀ (No. B 2075) from Voigtsgrund, and 2 sub-adult ♀♀ (No. B 2058) from Ababis, S.W. Africa (R. W. Tucker, 19/12/15 and 30/12/15. Percy Sladen Memorial Expedition).

The specimen from Voigtsgrund (S.E. Maltahohe) and one from Ababis appear at first to be distinct from *A. variegata*; not only are they much darker and redder in colour, but their legs are relatively longer and the vulva appears slightly different in that the central subquadrate pan figured in Purcell's description (*loc. cit.*) is incomplete, being in fact shaped like a low broad **M**; it is probable, however, that the central point has yet to grow down over the softer tissue below, and so complete the "pan."

The differences noted do not seem sufficient on the material to hand to separate them as a distinct species, but have been ascribed to the varietal range of the one species.

The measurements noted for the specimens are as follows:

Carapace equal in length to the tibia, metatarsus and tarsus of 1st leg, and equal or subequal to patella, tibia and metatarsus of 1st leg; breadth equal to metatarsus and $\frac{1}{2}$ tarsus of 1st leg, and slightly exceeds metatarsus and tarsus of 4th leg; total length 13 mm.; carapace 6·5 mm. long and 3·5 mm. wide; 1st leg (to coxa) 12 mm., 4th leg 13·6 mm. In Purcell's type-specimens the carapace usually equals patella, tibia, metatarsus and $\frac{1}{3}$ tarsus of 1st leg, and the breadth equals metatarsus and $\frac{5}{6}$ of tarsus, and was much greater than metatarsus and tarsus of 4th leg; and in addition the legs were shorter than the above; some of the specimens varied still more. The remaining specimen from Ababis, however, differed but very slightly from the above measurements of type-specimens, hence the species has been taken as occurring in the localities mentioned above.

ADONEA PARVA n. sp. (Plate XXVIII, fig. 2).

Specimens.—One ♂ (No. B 3701, Type), Junction of Marico and Crocodile Rivers, N.W. Transvaal (R. W. Tucker, 1–2/18).

Colour.—Carapace red, shading to brown posteriorly; clothed with appressed white hairs. Chelicera red, becoming browner apically;

clothed basally with white hairs and apically with dark hairs. Abdomen testaceous with a slightly darker median band; hairs fine and light in colour; under surface dark, genital fold with a pale border. Sternum reddish-black, coxae infuscated brown, legs brown, tarsi slightly redder; femora infuscated, especially on the under surface. When dry the specimen appears dirty white in colour.

Carapace.—Surface coarsely punctate; length slightly exceeding the patella, tibia and metatarsus, and equal to the tibia, metatarsus and tarsus of the 1st leg; width equal to or slightly exceeding the tibia and metatarsus, and the patella, tibia and metatarsus of the 1st leg; also extending from the fovea to the posterior median eyes. Cephalic portion slopes slightly upwards from the anterior border to the posterior lateral eyes, thence level to the fovea, and then sloping, but not abruptly, to the posterior border.

Eyes.—Posterior median $1\frac{1}{2}$ diameters apart, and 5 or 6 times as large as the anterior medians. Ocular area $1\frac{1}{3}$ times as broad as long.

Sternum.—Surface punctate; length $1\frac{2}{3}$ times the greatest breadth.

Legs.—Metatarsus I bearing 2 apical spines on the under surface; metatarsus with 3 apical spines on the under surface; metatarsus III with 5 and metatarsus IV with 5–6 apical and 2 other spines down the centre of the under surface. Metatarsus IV slightly shorter than tibia IV. Calamistrum apparently absent. Tarsi IV, III and II with spines and bristles on the under surface, decreasing to a few bristles on tarsus I. Claw on IVth tarsus with 7–8 strong teeth.

Cribellum.—Two small plates at the base of the inferior spinners, with an anterior strip of clear tissue furnished on either side with distinct muscle sigilla, having the appearance of extra cribellal plates.

Pedipalps.—As in figure.

Measurements.—Total length 6 mm. Carapace 2·9 mm. long, 2·2 mm. broad.

Gen. STEGODYPHUS, Sim.

Stegodyphus deserticola, Purc.

1908. *Stegodyphus deserticola*, Purc. in L. Schultzes Reise, Zool. Bd. 1, p. 217, pl. 11, f. 5, ♂ and ♀.

Specimens.—2 ♂♂ and 33 ♀♀, 1 juv. (Nos. B 2152 and 2157), from Gurumanas, S.W. Africa (R. W. Tucker, 7–8/1/16. Percy Sladen Memorial Expedition).

The specimens coincide with Purcell's description, with the slight exception that the cephalothorax is more orange than red in colour, the anterior legs do not redden appreciably distally, and the "yellow" hairs are in general a bright orange colour. The ♂ ♂ (apparently newly moulted) were still less red in colour, and the orange hairs on ocular tubercle were very scanty.

The species is gregarious and lives in nests constructed on thorny bushes or small acacias; the central, inhabited portion of the nest is composed of dense matted silk, often combined either intentionally or most probably by wind agency with very fine sand, and interwoven with wings and bodies, etc., of various insects captured by the colony. The latter live in the tunnels of the central mass, and their prey is caught by the large outer network spread over the bush surrounding the central mass. The spiders themselves were fairly sluggish when disturbed; in one nest egg capsules of the circular tabloid shape common to the *Eresidae* were fairly plentiful; in others the young spiders had already hatched out, and in some cases were forming their own communities.

Specimens (No. B 2111) from Haris, S. of Windhuk, S.W. Africa (R. W. Tucker, 9/1/16), were sub-adult ♀ ♀ (7 mm. long), paler, with less white hairs and scarcely any orange ones; carapace was also longer relative to the legs, being equal to tibia, metatarsus, and ½ or more of tarsus of 1st leg. These specimens, however, and others coincide with the young specimens of *deserticola*, and the above and following localities in S.W. Africa can be no doubt added to those in which *S. deserticola* is to be found—Namsem, Kabiras, Nauchas, Areb, Choaberib and S.W. Windhuk—at all of which specimens were taken.

GEN. DRESSERUS, Sim.

DRESSERUS COLSONI, n. sp. (Plate XXIX, fig. 4).

Specimens.—2 ♀ ♀ and juvs. (No. 13172, Types) and 2 ♀ ♀ (No. 13556) from Lydenburg, Transvaal (R. Colson, 11–12/03 and /04).

Colour.—In spirits carapace is dark red; chelicera very slightly darker; legs reddish-brown, anterior ones darker; abdomen dull testaceous brown, covered with short dark hairs. Sternum and coxae medium brown; mouth-parts slightly redder.

Carapace.—Equal in length to tibia, metatarsus and tarsus, and to patella, tibia and $\frac{4}{5}$ metarsus of the 1st leg; and to the patella, tibia and $\frac{3}{4}$ metatarsus of the 4th leg. Width subequal to the tibia and metatarsus of the 1st leg, and reaching from the bottom of the fovea to the anterior median eyes. Cephalic portion of carapace fairly well raised above the thoracic.

Eyes.—Posterior medians 1½ diameters apart; in area 4–5 times the size of the anterior medians, the centres of which lie on or above the line joining the lower borders of the anterior medians. Anterior laterals slightly more than 3 times the posterior medians' diameter from the latter. Ocular area barely 3 times as wide as long.

Sternum.—Less than twice as long as wide.

Legs.—Metatarsus IV with 4–5 moderately long fine spines apically on the under surface; legs otherwise spineless.

Vulva.—As in figure.

Measurements.—Length of carapace 4·5 mm.; breadth 4 mm. (ratio of length to width 1·2 : 1). Total length 16 mm.

DRESSERUS KANNEMEYERI, n. sp. (Plate XXIX, figs. 5 A–C and 7 C).

Specimens.—1 ♂ (No. B 27) and 3 ♀ ♀ (No. B 242), Types; and 4 ♀ ♀ (No. 14612) from Smithfield, O.F.S. (Dr. D. R. Kannemeyer, 12/09).

♂. *Colour.*—Carapace very dark, black-red; clothed with short, appressed, dull white hairs over entire surface (save for posterior border), and with long olivaceous black hairs at sides and posterior border of cephalic portion, and to a less extent anteriorly. Chelicera reddish-black, darker anteriorly, and clothed with long olive-black hairs. Abdomen dull testaceous, clothed with moderately long olive-black hairs and short sparse white ones, thus giving a slightly mottled appearance, and with 4–5 broad arrow-head markings dorsally posterior to sigilla; under surface infuscated around and above spinners and cribellum. Legs reddish-brown and slightly infuscated; metatarsi lighter and redder, especially metatarsus I; tarsi darker. Hairs on legs dark olivaceous in colour. Sternum, labium and coxae of pedipalps reddish-brown in colour; coxae of legs olivaceous brown.

Carapace.—Surface finely reticulate. Equal in length to patella, tibia and $\frac{2}{3}$ metatarsus, and slightly less than tibia, metatarsus and tarsus of 1st leg. Width equal to or slightly exceeding tibia and metatarsus, and equal to patella, tibia and $\frac{1}{6}$ metatarsus of 1st leg; it also exceeds the distance from fovea to front of ocular tubercle by $\frac{3}{4}$ or more of the length of the tubercle. Seen from above, the carapace does not appreciably narrow anteriorly, although the widest portion is, as in *D. rostratus* (Purc.), behind the posterior lateral eyes. Cephalic portion is also very flat and slopes slightly from posterior border to anterior, *i. e.* highest portion posteriorly (see fig. 7 C). Ocular projections as in *rostratus*, *armatus* and *subarmatus*; base of each anterior lateral tubercle stretches as a faint blunt ridge to posterior lateral eyes.

Eyes.—Posterior medians about 2 diameters apart and 4–5 times as large as the anterior medians. Posterior laterals wider apart than anterior laterals, as in *subarmatus*, but forming with anterior laterals an area $2\frac{1}{2}$ times as wide as long.

Abdomen.—Genital orifice surmounted by 2 small oval plates fringed over with hairs, and with 2 vertical rows above composed each of 3 muscle attachment stigmata.

Cribellum.—As in fig. 5 B. Basal portion in diagram is anterior border in specimen.

Chelicera.—Moderately long, with fairly stiff hairs on anterior border of fang groove, and with a few small blunt denticles on posterior border of groove at base of the inner cheliceral projection.

Sternum.—Twice as long as wide.

Labium and coxae of pedipalps with slight lateral depressions across them.

Legs.—Metatarsus I straight, red and spineless; metatarsus II straight, duller in colour, and with 2–3 spines apically on under surface; metatarsus III with numerous, and metatarsus IV with 7–8 long slender spines apically on under surface. Calamistrum weak. Tarsus IV without spines, but with dense stout black bristles on under surface; other tarsi also with bristles on under surfaces, but becoming finer and sparser anteriorly. Tarsal claws of 4th leg with a single row of 8–9 teeth; the distal ones long and stout, the basal ones shorter, finer and closer together.

Pedipalps.—As in fig. 5 A; very similar to *D. subarmatus* (Tullgr.).

Measurements.—Total length 11·5 mm.; length of carapace 5·6 mm., width 4·3 mm.

♀. *Colour.*—Seen in spirits, carapace appears blackish-red, covered with dark hairs; abdomen infuscated testaceous, and densely covered with dark hairs; under surface of abdomen slightly lighter; and as is characteristic of *Dresserus*, ornamented with numerous muscle attachment stigmata, of which those directly above the vulval plate and those below are arranged in fairly regular lines. Sternum, coxae, etc., dark reddish-brown; legs slightly browner than carapace, and posterior one slightly lighter. When dry, the specimens were seen to be covered with silky olive-black hairs having a pale sheen.

Carapace.—Equal in length to patella, tibia, and metatarsus, and greater than tibia, metatarsus and tarsus of 1st leg; and equal to patella, tibia and metatarsus of 4th leg. Width equal to tibia, metatarsus and $\frac{1}{3}$ tarsus of 1st leg, and stretches from bottom of fovea to anterior border of carapace. Surface faintly reticulate; highest portion just behind posterior lateral eyes, *i. e.* cephalic portion is slightly arched.

Eyes.—Posterior medians about 1½ diameters apart, and at least 4 times the area of the anterior medians; latter with their centres about in a line with anterior margins of the posterior medians; anterior laterals slightly larger than anterior medians and than posterior laterals. Ocular area 3 times as wide as long.

Chelicera.—Much as in ♂, but blunter and coarser; bristles shorter and stouter.

Sternum.—Length less than twice the greatest width.

Legs.—Metatarsi III and IV armed with 3–5 spines each, on under surface, apically.

Vulva.—As in fig. 5 c.

Measurements.—Length 18 mm. Carapace 7·5 mm. long, and 5·7 mm. wide; *i. e.* ratio of length of carapace to width slightly over 1·3 : 1.

DRESSERUS NIGELLUS, n. sp. (Plate XXIX, fig. 6).

Specimens.—One ♀ and juv. (No. B 2977, Type), Matroosberg; altitude 3500-3700 ft. (1/17, R. W. Tucker).

Colour.—In spirits the carapace is black tinged with red; chelicera black, legs blackish-brown, the anterior ones being darker. Abdomen infuscated testaceous, clothed with black hairs; sternum reddish-brown; labium and coxae of pedipalps darker; coxae and under surface of legs tinged olivaceous. When dry the general colour is darker.

Carapace.—Equal in length to the patella, tibia and metatarsus of the 1st leg, and greater than the tibia, metatarsus and tarsus of the same; also equal in length to the patella, tibia and ½–⅔ metatarsus of the 4th leg. Width equal to the tibia and metatarsus of the 1st leg, and to the distance from bottom of the fovea to just behind the posterior median eyes. Upper surface of the carapace flat and not much raised above the fovea.

Eyes.—Posterior medians slightly over one diameter apart, and from 6–7 times the area of the anterior medians; latter very small and with their centres above the line joining the lower borders of the posterior medians. Anterior laterals just over twice the posterior medians' diameter from the latter, and larger than the posterior laterals. Ocular area 3 times as wide as long.

Chelicera.—With stiff short hairs around fang and groove.

Sternum.—Twice as long as wide.

Legs.—Metatarsus IV with 5–6 spines apically on under surface.

Vulva.—As in fig. 6.

Measurements.—Carapace 5·5 mm. long and 3·75 mm. wide (*i. e.* ratio 1·47 : 1) ; sternum 3 mm. long.

Total length 14 mm.

The juv. specimen is lighter and redder save for the abdomen, which is slightly darker.

DRESSERUS SCHREINERI, n. sp. (Plate XXIX, fig. 7 A–B).

Specimens.—Two ♂ ♂ and 4 ♀ ♀ (No. 9464, Types) from Hanover. (S. C. Cronwright Schreiner, 10/01).

♂. *Colour.*—Seen in spirits, carapace is very dark red ; abdomen pale testaceous with slight infuscate mottling, and with 4–5 light arrow-head markings posterior to sigilla. Legs brown, unicolorous, and clothed with dark hairs ; tarsi slightly darker. Sternum and coxae the same colour as the legs anteriorly, but slightly lighter posteriorly. Labium and coxae of pedipalps darker brown and white tipped. When dry, thoracic portion is seen to be covered with white appressed hairs ; a stiff brush of olive-black hairs rises from posterior slope above fovea, and foveal region is clothed with dull white hairs. Abdomen is clothed with short, and a few long, olivaceous brown hairs, and tufts of white ones ; dorsal sigilla are ringed with white hairs. Legs are clothed with olive-brown hairs having a whitish sheen. Chelicera are clothed with appressed dark hairs.

Carapace.—Surface reticulated. Length equal to tibia, metatarsus and tarsus, and to patella, tibia, and $\frac{4}{5}$ metatarsus of 1st leg ; width equal to patella, tibia and $\frac{1}{4}$–$\frac{1}{3}$ metatarsus, and equal to tibia and metatarsus of 1st leg ; also stretches from fovea to nearly the length of the ocular tubercle in front of anterior margin of carapace. Cephalic portion broader than long, slightly narrower anteriorly, flat on upper surface and raised abruptly above thoracic portion ; latter slightly arched posterior to fovea (fig. 7 B), and foveal region considerably depressed. Ocular projections not so prominent as in *D. kannemeyeri*, etc.

Eyes.—Posterior medians 2 diameters apart, and about 2½ diameters from the anterior laterals. Anterior medians with their centres considerably above a line joining lower margins of posterior medians, the latter being about 3 times the size of the anterior medians. Lateral ocular area narrower anteriorly and 3 times as wide as long posteriorly.

Abdomen.—With large, harder and darker area above genital area ; plates and sigilla inconspicuous (*cf. D. kannemeyeri*).

Chelicera.—Much as in *D. kannemeyeri*.

Sternum.—Twice as long as wide.

Legs.—Metatarsus I straight and spineless ; metatarsi II and III with 2 spines apically on under surface; IV with 4 apically and 1 lower down on under surface; calamistrum very faint, the bristles being only just distinguishable from the hairy clothing of the leg. Tarsi clothed as in *D. kannemeyeri*.

Tarsal claws of 4th leg with 5–6 subequal teeth.

Pedipalps.—Palpal organ as in fig. 7 A.

Measurements.—Total length 9·5 mm. Carapace 4 mm. long, 3 mm. wide.

♀. *Colour.*—In spirits carapace is dark red, chelicera reddish-black; the legs are brown, the anterior ones being redder and darker distally. Abdomen dull testaceous, and clothed with moderately long dark hairs. Sternum, coxae, etc., syncolorous with the legs; labium and coxae of pedipalps darker and redder. When dry the carapace is seen to be covered with long upstanding and shorter more appressed dark olivaceous hairs, which have brownish tinge; hairs on abdomen are brown to reddish-brown; similarly with hairs on legs.

Carapace.—Equal in length to patella, tibia, metatarsus, and $\frac{1}{3}$–$\frac{1}{2}$ tarsus of the 1st leg, and to patella, tibia and $\frac{1}{2}$ metatarsus of IVth leg. Width equal to patella, tibia and $\frac{1}{3}$–$\frac{1}{2}$ metatarsus, and to tibia, metatarsus and $\frac{1}{2}$ tarsus of 1st leg; also reaches from fovea to about the centre of posterior median eyes. Surface faintly punctate. Cephalic portion well raised above thoracic, and very slightly arched.

Eyes.—Posterior medians $1\frac{1}{2}$–2 diameters apart and 3 diameters from anterior laterals; seen from in front anterior medians have their centres above a line joining the lower margins of posterior medians; latter at least 4 times the area of the former. Lateral ocular area 3 times as wide as long.

Sternum.—Twice as long as wide, and slightly depressed anteriorly.

Chelicera.—With no bristles, but with fine hairs around fang and groove.

Legs.—Both metatarsi III and IV without spines apically on under surface.

Vulva.—Similar to *D. colsoni* (Plate XXIX, fig. 4). Central tongue broader, lateral pits less anterior in position.

Measurements.—Total length 16 mm.; carapace 5·5 mm. long, and 4 mm. wide, *i. e.* ratio 1·4 : 1.

In the largest specimen (length 17·5 mm., carapace 6·1 and 4 mm.) hairs on carapace and abdomen are much redder, and legs are longer relatively to carapace; in other specimens from Hanover (B 1498) hairs on abdomen and carapace have no reddish tinge but are dark olivaceous; otherwise proportions and vulva are much the same.

Dresserus sericatus, n. sp. (Plate XXIX, fig. 8).

Specimens.—♀ (No. B 2197, Type), from Nauchas, S.W. Africa (R. W. Tucker, 3/1/16), and ♀ (No. B 2115), from between Nauchas and Areb (do., 1/16. Percy Sladen Memorial Expedition.)

Colour.—Cephalic portion of carapace dark reddish-brown, and clothed with dense, almost scopula-like dark hairs; from fovea to posterior border pale brown. Abdomen testaceous, covered with long, silky, dark hairs, having a dull yellow sheen; hairs on under side of abdomen sparser and shorter. Under surface of legs, coxae, sternum, etc., pale brown, slightly darker anteriorly and covered with long fine hairs. Labium and coxæ of pedipalps dark brown, and with anterior white borders very distinct. Chelicera almost black; legs light brown, darker distally, especially anterior legs, which become reddish, and clothed with fairly dense black hairs from patella onwards; rest of legs and sternum also covered with long dark silky hairs.

Cephalothorax.—As long as patella, tibia, metatarsus and $\frac{1}{3}$–$\frac{2}{5}$ of 1st leg, and slightly exceeding tibia, metatarsus and tarsus of 4th leg. Width equal to patella, tibia and $\frac{1}{3}$ metatarsus of 1st leg, and extends from fovea to anterior surface of ocular tubercle. Cephalic portion about the same width as the thoracic, and raised fairly abruptly above it.

Eyes.—Posterior medians $1\frac{1}{2}$–2 diameters apart and 3 diameters from anterior laterals. Seen from the front the centres of anterior median eyes lie on or above a line joining the lower edges of posterior median eyes; latter less than 4 times the area of the former.

Legs.—Metatarsus III with several short spines apically on under surface, metatarsus IV with 5–6 moderately long fine spines apically, mixed with setae, and 2 spines centrally lower down.

Sternum.—Nearly twice as long as wide.

Vulva.—Orange-red in colour, raised, and with surface lightly punctate; convoluted vesicula seminalis show through in spirits as the dark markings indicated in fig. 8.

Measurements.—Total length 11 mm.; carapace 4·8 mm. long and 3·1 mm. wide, *i.e.* ratio of length to breadth, about 1·55 : 1.

In the 2nd specimen (No. B 2115), which is subadult, the vulva has not yet appeared although the specimen is 10·5 mm. long.

Family ZODARIIDAE.

Gen. DIORES, Sim.

Diores auricula, n. sp. (Plate XXVIII, fig. 3).

Specimens.—One ♀ (B 3905, Type), Insiza, Rhodesia (G. French).

Colour.—Carapace dark yellow, cephalic portion a little darker;

legs pale yellow; dorsal surface of abdomen violet-black with a long 3-lobed testaceous patch centrally and 2 broad testaceous spots posteriorly; under surface light.

Carapace.—Surface without hairs or infuscation; median ocular area dark; clypeus only very faintly infuscated down to the centre, and at least $2\frac{1}{3}$ times the diameter of an anterior median eye.

Eyes.—Anterior medians large, considerably less than a radius apart and nearly touching the laterals, which are about $\frac{1}{4}$ their size. Posterior row strongly procurved; medians slightly smaller than the laterals, and nearer to them than to each other. Posterior laterals subequal to the anterior laterals. Median ocular area considerably broader than long.

Chelicera.—Bearing stout spiniform bristles apically on the inner portion of the anterior surface.

Pedipalps.—Dorsal scopular patch small and bristle-like.

Legs.—Bearing short spiniform hairs, which are denser on the tarsi and longer on the posterior legs. Tibia I with 3 pairs of slender spines on the under surface; patella with 1–2 spines distally on the dorsal surface. Metatarsus and tibia II with numerous spines; patella with 3 spinules on the anterior surface, 2 dorsally, and 1 distal spine on the posterior surface. Patella III with 3 pairs of strong spinules dorsally. Patella IV similar with a small additional basal spine. Metatarsus I at least $1\frac{3}{4}$ times the length of the tarsus; metatarsus IV $2\frac{1}{3}$ times the length of the tarsus.

Vulva.—As in fig. 3.

Measurements.—Carapace 2·3 mm. long; total length, 5·4 mm.

DIORES BIFURCATA, n. sp. (Plate XXIX, fig. 13 A–E).

Specimens.—2 ♂♂, 1 ♀ (No. B 2792, Types) and 1 ♀ (No. B 2803), from Gt. Winterhoek Mts.; altitude 3900–4100 ft. (R. W. Tucker, November, 1916).

♀. *Colour.*—Carapace pale brown, considerably infuscated, especially on thoracic portion, on which there are fairly distinct radial infuscations. Abdomen purple-black above, with or without faint lighter median marks posteriorly, sides and lower portion pallid; surface smooth and shiny. Legs the same colour as carapace.

Cephalothorax.—Rectangular anteriorly, cephalic portion slightly raised. Clypeus very broad and vertical and with central infuscation from anterior median eyes widening out to entire extent of anterior border of carapace (fig. 13 E).

Eyes.—Anterior row seen from in front strongly procurved; medians round, only slightly larger than laterals; about $\frac{1}{2}$ a diameter from each other and slightly less from the laterals; posterior row seen from above more procurved and slightly wider than the anterior row. Medians subequal to laterals, about $1\frac{1}{2}$ diameters apart and slightly less from the laterals, and a little less than a diameter behind the anterior medians. Posterior laterals round, nearly touching the anterior laterals, and equal to them in size; fig. 13 A.

Chelicera as in fig. 13 E. Inner border of apex with one spinule; outer border bearing stout bristles.

Pedipalps with anterior scopular patch on inner surface of tarsus; bristles on under surface very fine. Tarsal claw strongly toothed, as in *Zodarion* (Sim).

Legs.—Tarsi with no scopulae; tarsus of 1st leg with no fascicle, claws short and toothed; metatarsus only slightly longer and slightly stouter; femur with 3 spines down centre of dorsal surface; rest of leg with no spines. Tarsus of 2nd leg with 8 pairs of short spines on the under surface and with one or two short fascicular hairs distally; metatarsus about $\frac{1}{3}$ as long again as the tarsus and bearing 2 apical and 3 pairs of other spines on the under surface, together with a few bristles; patella bearing two spinules and 1 spine on the inner upper surface; femur with 3–4 spines dorsally down the centre. Tarsus of 3rd leg short and also with paired spines on under surface; metatarsus about $1\frac{3}{4}$ times its length, and with 2 apical and 6–7 other spines on the under surface; patella with 3 spinules on the anterior upper surface and 1 distally on posterior upper side; femora of 3rd and 4th legs also spined dorsally. Tarsus of 4th leg with very numerous short spines on the under surface; metatarsus long, slender, over twice the length of the tarsus and sparsely spined save at the apex, which bears numerous spines; patella with 3 spinules on the anterior surface and 1–2 on the posterior surface.

Vulva.—As in fig. 13 B, the lower lip-like portion projects at right angles to the rest of the surface.

Abdomen.—With small chitinous tracheal opening on ventral surface immediately anterior to the spinners and with traces of anterior openings level with the lung pockets (*cf. D. salisburyensis*, n. sp.).

♂. *Colour.*—Carapace pale golden-brown, with small granule-like spots, giving a mottled appearance; legs pale golden-brown; tarsi lighter than the metatarsi; dorsal scutum of abdomen darker brown, with considerable mottled infuscation; sides and inner portion of abdomen slightly ridged, and densely mottled to just above the spinners with purple-black infuscations; under surface of abdomen pale; sternum, coxae, etc., pale testaceous.

Cephalothorax.—More evenly and slightly less convex than in the ♀; cephalic portion scarcely raised; clypeus very broad and infuscated as in the ♀.

Eyes.—Much as in ♀. Median ocular area very slightly wider than long; seen from in front the lateral eyes appear nearly circular, subequal to the medians and nearly touching them.

Legs.—Tarsus I long, slender and cylindrical; bearing no spines or scopula, but with fine bristles on lower surface; metatarsus longer than the tarsus and with 0–1 spines; no scopula, but with numerous stout bristles on the under surface; tibia with 4 spines on the lower surface; patella with no spines, femur with a few bristles. Tarsus II similar to I but shorter; metatarsus II about $1\frac{2}{5}$ times as long as the tarsus, bearing fine spines apically and a few other scattered ones in addition to bristles; patella and femur similar to I. Tarsus III with long stout bristles and fine spines on the under surface; metatarsus at least twice the length of the tarsus and with fairly numerous scattered spines in addition to bristles; tibia with paired spines below, and with other scattered ones; patella with 3 spines anteriorly and 0–1 posteriorly.

Tarsus IV similar to III; metatarsus $2\frac{1}{2}$ times as long as the tarsus and with numerous scattered spines and bristles; tibia irregularly spined; patella with 3 spines on anterior upper surface, and 0–1 posteriorly; femur with 3 spines above but with no long bristles below.

All tarsal claws long and well toothed; tarsi projecting slightly below the claws and receding slightly above them. Femora moderately robust. Coxa I subequal to coxa IV; coxa III subequal to coxa II, and slightly over $\frac{1}{2}$ the length of coxa IV.

Pedipalps.—Short; femur nearly straight, sub-cylindrical, and with 2 spines on anterior upper surface; patella short and swollen; tibia in fig. 13 c; the posterior spine is somewhat laminated and much broader than the anterior one (*cf. D. simoni*); tarsus longer than the femur, broad, and bearing 2 stout spines distally. Palpal organ as in fig. 13 D.

Chelicera.—Inner apex with stout spinule and one or more smaller ones. Anterior border of groove with 4 small spinules or stout bristles.

Abdomen.—With short transverse chitinous line on ventral surface at base of spines, and only visible when latter are protruded; a chitinous mark on each side level with the lung apertures is also present (see *D. salisburyensis*).

Spinners.—Slightly more cylindrical than in the ♀.

Measurements.—♀ Carapace 2 mm. long; total length 4·7 mm. ♂ Carapace 2·1 mm. long; total length 4 mm.

These specimens were taken in the vicinity of a colony of large yellowish-brown ants (*Camponotus* sp.), which they resemble when rapidly running; one ♂ was taken running in company with them when they were disturbed, and exhibited a marked resemblance at the time.

A ♂ specimen (B 2984) from the Matroosberg Mts., 4000–4500 ft. (R. W. Tucker, 20/1/17), is slightly more golden in colour, especially the scutum of the abdomen, which is even paler than the carapace and in strong contrast to the black surface surrounding it; the infuscation of the clypeus is also very faint.

DIORES CAPENSIS, n. sp. (Plate XXVIII, fig. 5).

Specimens.—1 ♂ (B 1219, Type), Bergvleit, Cape Flats (R. W. Tucker, 6/15).

Colour.—Carapace pale yellowish-brown with infuscated mottling, increasing in density anteriorly. Legs testaceous in colour, femora slightly darker. Abdomen with a brown mottled scutum extending $\frac{3}{4}$ the dorsal length; remainder of dorsal surface blue-grey in colour, under surface pale testaceous.

Eyes.—Anterior medians at least $\frac{1}{2}$ a diameter apart, laterals about $\frac{1}{3}$ their size. Posterior row strongly procurved, medians 1–1$\frac{1}{2}$ diameters apart and slightly nearer to the laterals, which are subequal to them and smaller than the anterior laterals. Clypeus twice the diameter of an anterior median eye, and slightly infuscated down the centre; region of anterior row of eyes deeply infuscated.

Abdomen.—Epigastric scutum absent; tracheal slit anterior to spinners moderately distinct; markings level with lung pockets not apparent.

Legs.—Tarsus I with a double line of fine bristles down the centre; metatarsus a little longer than the tarsus, with a similar double line and some spines apically; tibia with 4 pairs of fine spines on the under surface. Second leg similar; bristles stouter, metatarsus also bearing spines; tibia with only 3 pairs of fine spines; 3rd leg similar, spination stronger, metatarsus about 1$\frac{1}{4}$ times the length of the tarsus; 4th leg longer and slenderer, metatarsus 1$\frac{1}{2}$ times the length of the tarsus. Patellae I and II without spinules; patella III with 5, and patella IV with 3, spinules on the dorsal surface. Femora each bearing 2 short spines on the dorsal surface.

Pedipalps.—Tibia with a large apical projection on the outer dorsal surface which, viewed from the ventral surface, is seen to be bifurcate from the base. Palpal organ as in figure.

Measurements.—Length of carapace 1·8 mm. ; total length 3·5 mm.

DIORES DRURYI, n. sp. (Plate XXVIII, fig. 4).

Specimens.—1 ♀ (B 4634, Type), Grootfontein, S.W. African Prot. (J. Drury and R. M. Lightfoot, 1/19).

Colour.—Carapace golden yellow anteriorly, pale yellow posteriorly ; legs pale yellow, darker distally ; abdomen blue-grey down the centre of the dorsal surface, and with a light mark anterior to the spinners ; ventral surface pale.

Eyes.—Medians about ½ a diameter apart ; otherwise as in *D. auricula.* Clypeus about 1½ times the diameter of an anterior lateral eye, and not infuscated. Region of anterior row of eyes strongly infuscated.

Chelicera.—As in *D. auricula.*

Pedipalps.—Bearing usual apical scopular patch.

Legs.—Tarsus bearing sparse fine bristles on the under surface ; metatarsus twice the length of the tarsus, and bearing a few spiniform hairs and spines down the under surface. Tarsus II bearing stout bristles and fine spines on the under surface ; metatarsus 1¾ times as long and bearing 4–5 pairs of spines in addition to bristles on the under surface ; patella bearing 3–4 spines on the anterior dorsal surface. Tarsus III clothed with stiff bristles ; metatarsus about 2¼ times the length and bearing numerous spines in addition to bristles ; patella III with 10 spines on the dorsal surface ; tibia with 5 stout spinules on the dorsal surface in addition to bristles. Fourth leg similar, patella with 8 spinules on the dorsal surface, tibia with 3-4 spinules.

Abdomen.—Ventral tracheal slit wide and conspicuous ; sigilla at sides of lung pockets visible.

Vulva.—As in figure.

Measurements.—Length of carapace 2 mm. ; total length 4·5 mm.

DIORES JONESI, n. sp. (Plate XXVIII, fig. 6 A–B).

Specimens.—4 ♂ ♂, 1 ♀ and juv. (B 3633, Types), Mfongosi, Zululand (W. E. Jones, 1/2/18).

♂. *Colour.*—Carapace dark brown, strongly infuscated. Abdomen purple-black with a black dorsal scutum extending over ⅔ of its length ; ventral surface light purple in colour, epigastric scutum pale brown. Mouth parts and coxae pale brown, sternum slightly darker.

Femora of legs approximately the same colour as the carapace patellae onwards light brown, becoming paler distally.

Cephalothorax.—Surface smooth, slightly depressed anterior to the stria; infuscated mark anterior to the stria; cephalic portion slightly dome-shaped.

Clypeus.—At least 3 times as deep as the anterior median eyes, and approximately $\frac{4}{5}$ as deep as the chelicera; a light patch on clypeus on either side below and interior to the anterior lateral eyes.

Eyes.—Seen from above, both rows are procurved. Anterior medians moderately large, about $\frac{1}{2}$ a diameter apart, and touching the laterals, which are about $\frac{3}{4}$ their size. Posterior row slightly procurved; eyes equidistant; laterals touching the anterior laterals and subequal to them in size; posterior medians subequal to the laterals. Median ocular area wider than long, and slightly narrower posteriorly.

Abdomen.—Ventral tracheal slit at base of spinners, and sigilla at sides of lung pockets visible.

Pedipalps.—Tarsus and palpal organ as in fig. 6 B; tibia with a stout, outer, apical projection, and a more slender, curved projection on the dorsal apical surface. Patella with a very strong, broad apical projection on the outer ventral surface, and a smaller one on the inner apical surface, as in figure.

Legs.—Tarsus I bearing spiniform bristles on the lower surface; metatarsus spineless, and about $1\frac{1}{4}$ times the length of the tarsus. Tarsus II similar; metatarsus with 2–3 short spines apically, and with stout bristles anteriorly on the lower surface; length about $1\frac{1}{2}$ times that of the tarsus. Tarsus and metatarsus III with spiniform bristles on the under surface, denser apically; metatarsus with 4–5 spines apically on the under surface; length slightly over twice that of the tarsus. Tarsus IV densely clothed on the under surface with spines and spiniform bristles; metatarsus $2\frac{3}{4}$ times the length of the tarsus. Patellae without spines. Claws stout and strongly toothed.

♀. *Colour.*—As in ♂; abdomen dark purple-black dorsally, with no light spots posteriorly; ventral surface pale.

Cephalothorax and eyes as in ♂.

Clypeus.—Slightly deeper than in ♂; equal in depth to the chelicera; light markings as in ♂.

Pedipalps.—Anterior dorsal scopular patch present as in other species.

Legs.—Tarsus I bearing sparse bristles on the under surface; metatarsus $1\frac{1}{2}$ times as long as the tarsus. Tarsus with a sparse line of small spines down each side of the under surface, and bearing scattered bristles; metatarsus with spines and bristles, especially anteriorly, on the lower surface; length $1\frac{3}{4}$–2 times that of the tarsus. Tarsus and metatarsus III with numerous spines and stout bristles, metatarsus $2\frac{1}{4}$ times the length of the tarsus. Tarsus IV similar to III; metatarsus with spines and bristles anteriorly on the lower surface; length about $2\frac{2}{3}$ times that of the tarsus. Patella III with 2 spinules on the anterior surface; remaining patellae apparently spineless.

Abdomen.—As in ♂.

Vulva.—See fig. 6 A.

Measurements.—Carapace ♂ 1·8, ♂ 2·1 mm.; total length ♂ 3·8, ♀ 5·5 mm.

DIORES POWERI, n. sp. (Plate XXIX, fig. 14 A–D).

Specimens.—2 ♀♀ (No. B 3040, Types), Kimberley (Bro. J. H. Power, 2/17).

Colour.—Carapace and legs golden-brown; abdomen violet-black above, with central line of whitish spots faint and separate anteriorly, plainer and coalescing posteriorly; surface bearing sparse short hairs, especially along the central line; under surface almost white, entrance to lung-pockets brown and chitinous. Sternum and coxae lighter than carapace.

Cephalothorax.—Broad posteriorly, narrower and parallel-sided anteriorly; cephalic portion fairly well raised above the thoracic; median stria long, surface smooth with slight radiate infuscations.

Eyes.—Seen from above the anterior row is slightly procurved; the posterior row is approximately as wide as the anterior row and strongly procurved (fig. 14 C). Anterior medians very large, circular and prominent; less than $\frac{1}{2}$ a diameter apart and almost touching the laterals, the latter being slightly oval and much smaller than the medians. Posterior medians circular, 2–$2\frac{1}{2}$ diameters apart and 1 diameter behind the anterior medians; nearer to laterals than to each other. Laterals oval, subequal to and nearly touching the anterior laterals.

Clypeus.—Very deep, slightly sloping forward, and bearing bristles below the ocular tubercle. The latter is dark around the anterior median and lateral eyes, with a slight infuscation extending down the centre of the clypeus, and then broadening out along the anterior border of the carapace.

Chelicera.—Very stout, tapering to a blunt point, and flat on the inner, contiguous surfaces. Fang very short and broad basally; fang groove nearly as wide as long and muticous; posterior border with a slight keel (fig. 14 A–B).

Labium.—Longer than broad, with dark marks at base, and a soft pale anterior border, and extending over ½ the length of the pedipalp coxae; the latter are long, inclined inwards over the apex of the labium, narrow centrally and broader basally.

Pedipalps.—The tarsus bears a single claw densely toothed along one side of its entire length; the inner upper side of the tarsus has an oval scopular patch anteriorly; the under inner surface bears blunt spinose hairs. Tarsus about equal in length to the patella and tibia.

Legs.—Tarsus I long and slender, bearing two toothed claws but no fascicle; metatarsus longer and slightly stouter posteriorly; no spines or bristles on the upper surface of the leg. Tarsus II shorter, and bristles on the under surface stouter; metatarsus II bearing stout bristles above; tibia with bristles and 1 short stout spine anteriorly on the inner upper surface; patella with spinose hairs and a line of 6 short stout dark spines on the inner upper surface (8 on the larger specimen); femur with 1 small spine anteriorly on the inner surface, and a row of 4 small stout bristles posterior to it. Tarsus III shorter still, furnished with bristles all over, and with long regular spines on the under surface; metatarsus with a fringe of stout spinose bristles anteriorly on upper and lateral surfaces; upper surface with bristles and pairs of weak spines laterally; tibia armed with bristles and 4–5 short dark spines on the upper surface; patella with 13–15 (larger specimen with 26) spinules on the anterior upper surface and 2 (3 in larger specimen) posteriorly towards the centre; femur with 1 spine anteriorly on the upper surface. Fourth leg similar; patella with 12–14 (20 in larger specimen) spinules and 2–3 posteriorly towards the centre; metatarsus IV about 2½ times as long as the tarsus. On the under surfaces the tarsi have no scopulae, but bear stout bristles which are long, stout and spinose on tarsi III and IV; the metatarsi bear bristles and scattered spines which become stronger and more numerous on the posterior legs.

Sternum.—Anterior border straight, not produced beyond or as far as the anterior borders of coxae I; parallel sides as far as coxae III, and then tapering to a blunt shield shape. Coxa IV longer and larger than the rest; coxa II very slightly smaller than I.

Abdomen.—Posterior tracheal mark visible immediately anterior to the base of the spinners; lateral marks level with the lung opercula visible, and also 2 others just below the lung-pockets.

Spinners.—Short; inferior spinners when protruded subconical and soft; the short apical joint bearing a cluster of fusules. Median and superior spinners very short, placed alongside the anal tubercle, and only discernible when protruded; when retracted only the short inferior spinners are visible.

Vulva.—As in fig. 14 D.

Measurements.—Larger specimen, carapace 3 mm. in length; total length 6·2 mm.

DIORES SALISBURYENSIS, n. sp. (Plate XXIX, fig. 15 A and B and fig. 16).

Specimens.—1 ♂ (B 3281, Type) and ♀ and juv. (B 3249), Salisbury, S. Rhodesia (R. W. Tucker, 4/17).

♂. *Colour.*—Carapace golden-yellow, slightly darker anteriorly; dark line down the centre with a broad infuscated mark on each side anterior to the thoracic stria, and a short parallel infuscated line behind each post-median eye. Clypeus infuscated down the central portion; chelicera light yellowish-brown with dark hairs at the apices. Abdomen black on the dorsal surface with a white mark above the spinners; scutum extending over $\frac{1}{2}$ the length of the upper surface, and nearly black in colour, the central portion only being mottled brown. Under surface entirely pale testaceous and sparsely clothed with dark hairs; legs light yellowish-brown.

Cephalothorax.—Surface smooth; slightly depressed between the stria and the ocular area; highest at anterior point of stria and sloping thence to posterior border.

Clypeus.—About twice as deep as the anterior median eyes; anterior border black.

Eyes.—Seen from above, the front border of the anterior row forms a straight to slightly recurved line; the posterior border forms a strongly procurved line. Posterior row very strongly procurved (*cf. D. poweri*). Anterior medians very large; much less than $\frac{1}{2}$ a diameter apart and nearly touching the laterals, which are about $\frac{1}{5}$ their size. Posterior laterals subequal to and touching the anterior laterals; posterior medians equal to the laterals and nearer to them than to each other. Median ocular area wider than long. Infuscation around anterior medians and lateral eyes very strong; seen from in front the anterior row is procurved.

Legs.—Tarsus I long and slender, and clothed with stout hairs; no spines or spinules, but with rows of short bristles on the under surface; claws strongly toothed; metatarsus over $1\frac{1}{2}$ times the length of the tarsus; femur with 2 spines on the dorsal surface; rest of leg muticous. Tarsus II shorter and bearing numerous setose spines on the under surface; metatarsus $1\frac{1}{2}$ times as long as the tarsus, armed with a few scattered spines, and on the lower surface with bristly hairs, which are denser towards the apex; patella with 4 spines on the anterior surface. Femora II, III and IV each with 2 spines as in femur I. Tarsus III short, the under surface more densely clothed than in II; metatarsus over twice the length of the tarsus, and also more heavily armed than metatarsus II. Patella with 9 spines dorsally on the anterior border and 3 on the posterior side. Tarsus IV missing; metatarsus very long, $1\frac{1}{4}$ times the length of metatarsus III; armed with sparse scattered spines; patella with 6 spines dorsally on the anterior border, 2 on the posterior border, and 1 centrally on the apical border.

Abdomen.—Dorsal scutum extending over the anterior half; epigastric scutum absent. Tracheal slit on ventral surface, anterior to the spinners, very distinct; markings level with the lung pockets not apparent.

Chelicera.—With 2 or 3 spinules and stout bristles on the inner anterior border.

Pedipalps.—Palpal organs as in fig. 15 A; the tarsus has a posterial dorsal prolongation as in fig. 15 B. Patella and tibia without spurs or prominent spines; tarsus with 6 apical spines on the under surface.

♀. *Colour.*—Legs and carapace slightly darker than in the ♂; dorsal surface of the abdomen with 5 distinct light marks down the central line posteriorly, the hindermost being contiguous; abdomen clothed with sparse, short, appressed hairs.

Carapace.—Similar to the ♂, cephalic portion slightly more convex; no central dark line, and only a slight infuscated mark anterior to the stria. Clypeus 3 times the diameter of an anterior median eye in depth; slightly infuscated, anterior border dark.

Eyes.—As in ♂; anterior medians smaller; posterior eyes nearly equidistant, medians lacking the posterior infuscated line and slightly smaller than the laterals.

Chelicera.—Well keeled on the inner border, and with 2 weak spines on the inner apex of the groove.

Pedipalps.—With the usual anterior scopular patch; bristles fine and sparse; tarsal claw dentate.

Legs.—Tarsus I slender; with stout hairs on the under surface, and a line of short spinules down the centre; no scopula or fascicle; metatarsus $1\frac{1}{3}$ times as long as the tarsus and with numerous irregularly paired spinules down the centre of the under surface; rest of leg spineless save for 2 spines dorsally on the femur. Tarsus II shorter and with a row of spinules down each side of the under surface; metatarsus 1–$1\frac{1}{2}$ times as long as the tarsus; patella with

1–2 spines on the anterior edge of the upper surface and with 2 on the posterior surface. Femora II, III and IV each with 2 fine spines dorsally. Tarsus III armed with coarse bristles on the under surface; metatarsus about 1¼ times as long as the tarsus, with fewer bristles, but with some scattered fine spines on the under surface, which are more numerous distally; patella with 4–5 spinules on the anterior edge of the upper surface. Tarsus IV slender, with sparse coarse bristles and numerous short fine spines on the under surface; metatarsus just over twice the length of the tarsus; patella IV with 5 spinules on the anterior surface.

Claws long and slender; slightly curved and dentate.

Abdomen.—Conspicuous ventral tracheal slit anterior to the spinners and separated from them by an infuscated band continuous with the dark dorsal surface; also a longitudinal chitinous mark on each side of the abdomen, slightly distant from the lung opercula; these may also be connected with a tracheal system.

Vulva.—As in fig. 16.

Spinners.—Inferior spinners moderately stout, sub-conical, and with a short apical joint; placed anteriorly to and separate from a group of 2 small median and 2 small superior spinners.

Measurements.—Carapace, ♂ 2 mm., ♀ 2 mm. long; total length ♂ 3·5 mm., ♀ 4·6 mm. 1 ♀ (B 3664) from Mochudi, Bechuanaland Protectorate (R. W. Tucker, 21/2/18), agrees with ♀ species of *salisburyensis*.

DIORES SETOSUS, n. sp. (Plate XXIX, fig. 17).

Specimens.—♀ (No. B 2823, Type), Gt. Winterhoek Mts., 4000–4800 ft. (R. W. Tucker, November, 1917).

Colour.—Cephalothorax golden-brown, cephalic portion darker than thoracic; abdomen purple-black, grained with lighter flecks, and with four pale central marks posteriorly; ventral surface pale, but with the dorsal infuscations extending around the spinners; sternum and coxae pale testaceous; legs golden-brown, tarsi darkening distally; labium and coxae of pedipalps darker brown, the latter having whitish tips.

Cephalothorax.—Surface smooth and bearing sparse short, scattered hairs; median stria very short, radial infuscations faint. Cephalic portion raised and well defined; clypeus not infuscated, but bearing one or two hairs below the ocular tubercle.

Abdomen.—Upper and under surfaces sparsely clothed with short stiff dark hairs. Under surface has only faint traces of tracheal markings (see *D. bifurcata* and *D. salisburyensis*).

Eyes.—Seen from above the anterior row is procurved; medians round, larger than the laterals and less than ½ a diameter from each other and from the laterals. Posterior row very slightly wider than the anterior row, and only moderately procurved; eyes practically equidistant; medians about 1½ diameters apart, and a diameter or less behind the anterior medians; laterals only very slightly larger than medians and almost touching the anterior laterals. Median area parallel-sided and slightly wider than long. All eyes surrounded by a circle of black pigment, which in the anterior row and laterals merges into an infuscated band prominent below the anterior medians.

Pedipalps.—Tarsus subconical; scopular patch small but distinct; no spines on palps, but numerous stout hairs and bristles; tarsal claw strongly and densely toothed down outer side.

Legs.—Much shorter than in the preceding species. Tarsus I short, and slightly tapering distally; under surface clothed with stout bristles; metatarsus stouter, about 1⅓ times as long as the tarsus, and bearing 2 apical and one other spines on the lower surface, besides stout setae or bristles. Tibia I with 2 spines apically on the lower surface and scattered bristles; patella I muticous; femur I with 2 spines on the upper surface. Tarsus II short, slightly tapering distally, and bearing short fine spines on the under surface; metatarsus II similar to I, about 1⅓ times as long as the tarsus; tibia II with 1 spine in centre dorsally, and 3 small ones anteriorly on the side; patella II with 3 spinules on anterior upper surface; femur II with 2 spines dorsally. Tarsus III with very stout dense bristles on the under surface; metatarsus III scarcely 1½ times the length of the tarsus; spined apically, and with scattered spines and numerous bristles on the under surface; tibia with 4 spines on the anterior surface, and with bristles and fine spines on the under surface; patella with 3 spines on the anterior surface, and 2 spines on the upper surface at the anterior edge, and 1 at the posterior edge; femur with 2 spines on the upper surface. Tarsus IV with numerous short spines and bristles on the under surface; metatarsus about twice as long as the tarsus, and with fine spines and bristles and numerous spines apically on the under surface; tibia with 4 spines on the anterior surface and 2 on the upper surface; patella with 3 spines on the upper surface anteriorly and 1 posteriorly.

Femora I, II and III bearing distally on outer surface a small distinct patch of short spiniform bristles.

Sternum, coxae, etc. Sparsely covered with long stiff dark hairs.

Vulva.—See figure.

Measurements.—Total length 4 mm.; carapace 1·75 mm. long.

Other specimens.—1 ♀ (B 3084), Matroosberg Mts., 5000 ft. (R. W. Tucker, 1/17). Also 1 ♀ (B 3073), Matroosberg Mts., 7000 ft. (R. W. Tucker, 1/17).

In this specimen the distal patches of bristles on outer surface of femora I–III show very clearly; the spinules, etc., on the legs are slightly less numerous. On examining the other species of this genus described in the paper it appears that the femoral character noted above is universal in both ♂ ♂ and ♀ ♀; in many cases a paler ring surrounds the group of short bristles giving the appearance of a sense organ. In *D. auricula*, however, the character is indistinct.

FAMILY HERSILIIDAE.

GEN. HERSILIOLA, Thor.

HERSILIOLA AUSTRALIS, Sim. (Plate XXIX, fig. 9)

1893. *H. australis*, Simon, Hist. Nat. des Araign, 2nd ed., vol. 1, pp. 442 and 445. ♀.

1910. *H. australis*, Simon, in L. Schultzes Forsch. r. Zool., vol. 4, Jena, p. 188. ♀.

Specimens.—One ♂ and 2 ♀ ♀ (No. 14481) from Poortjesfontein, Hanover (Neeser jr. 1905).

The specimens of *Hersiliola* in the Museum collection all seem referable to *H. australis*; variations occur in coloration, especially of the abdomen, but no specific distinctions are apparent. The dorsal abdominal pattern in general resembles the diagram of *Hersiliola* (*Hersilidia lucasii*, Cambr. O. P. P.Z.S. 1876, Pl. lviii, fig. 5). When dry, the abdomen, unless rubbed, has this pattern more or less obliterated by a clothing of white and orange hairs; the lateral bundles of white setae also stand out more clearly when dry.

The cephalothorax is often entirely clothed in white and orange hairs, though in most specimens they are partially lost or rubbed off.

Specimens have been obtained from Usib R. near Nomptsas, S.W. Afric. Prot. (♀ No. B. 2064, R. W. Tucker, Percy Sladen Memorial Expedition); Tsais, Bull's Mouth Pass, S.W. Afric. Prot. (♀ No. B. 2137, R. W. Tucker, Percy Sladen Memorial Expedition); Montagu Baths, Caledon (2 ♀ ♀ No. 12655, Dr. W. F. Purcell, 11/03); Stompneus, Malmesbury Div. (1 ♀ No. 11678, J. C. Gould, 3/02); Ashton, Robertson Div. (1 ♀ No. 3361, Dr. W. F. Purcell, 11/97); Beaufort West (1 ♀ No. 3937, Dr. W. F. Purcell, 9/96); Ceres (3 ♀ ♀

and juv. ♂ Nos. 3269 and 3270, Dr. W. F. Purcell and R. M. Lightfoot, 10/97). (These specimens are somewhat small in size and 1 ♀ appears melanic. The pattern on the back, seen in spirits, is almost obliterated by the presence of black pigment; similarly with the cephalothorax; femora and tibiae of legs are darkened and have a slight olivaceous tinge; under abdomen, sternum, coxae and femora are almost black; spinners are dark, but with the usual dark mark on the apical segment of superior spinners.) Robertson (1 ♀ No. 3350, Dr. W. F. Purcell, 11/97), slightly melanic; Colesberg (1 ♀ No. 8763, C. L. Leipoldt, 12/00); Mossel Bay (1 ♀ No. 908, Dr. W. F. Purcell, 4/96), also melanic.

Description of Male.—The ♀ ♀ which accompany the ♂ specimen from Hanover do not appear separable from *H. australis*; they tend towards being melanic, the under abdomen being dark or mottled and with light stripes at the side, whilst the sternum and coxae are dark or mottled.

General colouring of ♂ as in ♀ ♀; usual pattern on dorsal surface of abdomen bright and distinct, the light portion being invaded by darker markings; under abdomen mottled and banded at sides; carapace and sternum mottled; legs ochreous-brown, darker towards extremities, and posterior legs lightly banded.

Legs.—Longer than in ♀; 1st leg 12·5 mm.; in ♀ length is about 10 mm.; 4th leg 16 mm.; in ♀ 11 mm. Metatarsi of 3 legs distinctly curved downwards in the centre, and upwards distally; tarsi shorter and stouter than in the other legs, of which the tarsi are long and slender.

Pedipalps.—As in fig. 9.

In all cases it was noticed that the superior spinners of *Hersiliola* were subequal to the sternum in length, and that the apical lighter portion tended to be conical and straight; also the tarsus of the 1st leg exceeded ½ the length of the metatarsus in all cases. These additional characters serve to separate *Hersiliola* from *Tama*, since in the latter the tarsus is less than ½ the length of the metatarsus of the 1st leg; and the apical joint of the superior spinners in addition to being curved and longer than the basal joint is also longer than the sternum, generally equalling or exceeding the sternum and labium in length.

GEN. HERSILIA, Aud.

HERSILIA BICORNIS, n. sp. (Plate XXIX, fig. 10 A B).

Specimens.—♂ and ♀ (B 864, Types), Krantz Kloof, Durban, Natal (H. W. Bell-Marley, 12/14).

♂ and 2 ♀♀ (B 4255), Kaapmuiden, E. Transv., Low Veld (R. W. Tucker, 11/18).

One ♀ (B 4334), Komatipoort, E. Transv., Low Veld (R. W. Tucker, 11/18).

♀. *Colour.*—Carapace brown; lateral borders strongly infuscated, and with an irregular infuscated band from each side of the ocular tubercle to the posterior border of the carapace. Clypeus whitish, with an opaque band down the centre, and ornamented with 2 dark vertical marks underneath the anterior median eyes, and 2 conspicuous oblique marks stretching out and down from the sides of the median eyes. Ocular tubercle with an orange line down centre posteriorly. Transverse median band on chelicera very faint. Abdomen black, with testaceous mottling and with anterior lateral bars and outline of anterior black band, testaceous: also with 8 distinct muscle sigilla dorsally.

Legs and spinners as in *H. sericea*, Poc. When dry the clypeus is seen to be densely clothed with white hairs; lateral and central light portions of carapace also bearing short white hairs.

Carapace.—Longer than wide; width greater than the length of the distal segment of the metatarsus of either the 1st or 2nd legs, and subequal to the patella, tibia, and $\frac{1}{2}$ the metatarsus of the 3rd leg. Ocular tubercle very much raised above the carapace; ocular quadrangle scarcely longer than wide. Clypeus sloping forward, and at least $1\frac{1}{2}$ times the length of the ocular quadrangle in depth.

Eyes.—Anterior laterals smaller than the rest, which are subequal.

Legs.—Bearing white spines on the light and black spines on the dark portions.

Spinners.—Total length equal to the tibia of 1st leg; terminal joint much shorter than the tibia of the 1st or 4th leg.

Vulva.—As in fig. 10 A; distinct from *H. sericea*, Poc.

Measurements.—Length 7 mm.; width of carapace 3 mm.; apical segment of spinners, 4·5 mm.; 1st leg 22·5 mm.; 4th leg 19·5 mm. in length.

♂. *Colour.*—Much as in ♀; carapace and abdomen darker. Chelicera almost entirely dark.

Legs.—Spines numerous and black.

Carapace.—Breadth subequal to length.

Eyes.—Anterior medians much larger than the posterior medians; otherwise about equidistant and in square formation; anterior laterals very small.

Pedipalps.—Palpal organ as in fig. 10 B; femur with 2–3 slender spines on the dorsal surface, and 1 about the centre of the inner surface; patella with one slender basal spine, and 1 long apical spine on the upper surface; tibia with 1 long basal spine on the upper surface, and 2 short stout spines on the inner surface about the centre; also bearing long white hairs on the outer apical surface; tarsus as in figure; clothed with white hairs, and armed apically with 2 pairs of stout claw-like spines.

Spinners.—Length of superior spinners about $\frac{2}{3}$ the tibia of the 1st leg.

Measurements.—Length just over 6 mm.; spinners (apical segment), 3·5 mm. in length; 1st leg 25 mm., 2nd leg 24·5 mm. in length.

HERSILIA PUNGWENSIS, n. sp. (Plate XXIX, fig. 11).

Specimens.—1 ♂ (No. 13639, Type), Pungwe River, 5 miles S.E. of Umtali, Mashonaland (D. L. Patrick, 1901).

Colour.—Browner, and legs more strongly banded than in *H. bicornis.* Chelicera brown with black markings on the basal portion. Clypeus entirely dark with lighter markings around the anterior median eyes and two white spots in the centre of the border above the mandibles. Other characters as in *H. bicornis.*

Spines.—Less numerous than in *H. bicornis.*

Pedipalps.—Palpal organ as in fig. 11; the large process is stouter and shorter, and the smaller process oppositely curved to those in *H. bicornis.* Tibia with the 2 spines on the inner surface only moderately stout and with the apices bent over.

Measurements.—Length about 6 mm.; 2nd leg 24 mm. long. Apical segment of spinners 3 mm. in length.

A ♀ specimen (No. 12509) from Umtali (D. L. Patrick, 1903), may be the ♀ of *H. pungwensis.*

It differs from *H. bicornis* in appearance, in its smaller size and lighter brown colour.

The width of the carapace is subequal to the length, and is also much greater than the length of the distal segment of the metatarsi of the 1st or 2nd leg, being equal to the distal segment and to $\frac{2}{3}$–$\frac{3}{4}$ of the tarsus of the 2nd leg.

The total length of the superior spinners slightly exceeds the tibia of the 1st leg. The vulva has the median portion relatively longer than *H. bicornis,* and the lateral, inwardly projecting portions smaller; the anterior dark markings are absent, but lateral markings on the side portions are present.

Both ♂ and ♀ specimens are damaged.

GEN. TAMA, Sim.

TAMA INCERTA, n. sp.

Specimens.—Adult ♀ (No. 4298, Type) from Nieuwoudtville, Bokkeveld Mts., Calvinia (C. L. Leipoldt, 9/98), and others as below.

Colour.—Cephalothorax yellowish-brown, the centre and ocular tubercle being dark, and the border strongly mottled with black. Abdomen patterned much as in *Hersiliola*, though in many cases the lighter portions are darkened so as to leave crescents at the sides and centre, and spots, etc., posteriorly, gradations between both phases occurring. The legs and palpi are light brown and conspicuously banded with black, especially the 3rd legs. Under surface of body and coxae testaceous to faint brown; spinners dark brown. Abdomen, sternum, spinners and legs clothed with sparse, fairly long hairs, longer on upper surface of abdomen and denser on the legs; the upper surface of abdomen also has traces of bundles of white bristles as in *Hersiliola*. When dry, body, coxae and light bands of legs are covered with dull white and tawny hairs.

Chelicera.—Length equal to depth of clypeus.

Clypeus.—Over $1\frac{1}{2}$ times as deep as length of median ocular quadrangle.

Legs.—Metatarsi uni-articulate; that of the 1st leg equals or slightly exceeds twice the tarsus and is slightly shorter than the tibia and metatarsus of the 3rd leg.

Spinners.—With a dark mark on the outer side of basal joint of superior spinners and a dark mark basally on the upper surface of apical joint; the latter tapers fairly rapidly to the apex, towards which it has a slightly annulated appearance; in length the apical joint exceeds that of the sternum and labium together. (Sometimes the spinners are almost as short as in *Hersiliola*, but the annulated appearance is always present, and also the tapering and curving of the apical segment.)

Vulva.—Consists of a somewhat concave dark brown plate sunk below a projecting rim, which is black and thick at the edges, and shades to dark brown beyond; the rim is not continued round the posterior border of the plate.

Measurements.—Largest specimen 9·5 mm. in length; 1st leg 17, 3rd leg 12, and 4th leg 23·5 mm. long. Apical segment of spinners 3 mm. long. Length and width of carapace each 4 mm.

Average size 9 mm. long; 1st leg 16 mm., 3rd 11, 4th 20, and apical joint of super-spinners 2·5 mm. in length.

Specimens have also been obtained from the following localities: 7 ♀ ♀ and juv. ♂ (No. B 1633), Beaufort West (Dr. W. F. Purcell, 10/05); 2 sub-adult ♀ ♀ (No. 3938), Beaufort West (Dr. W. F. Purcell, 9/96); 2 ♀ ♀ (No. 14250), Touws R. (J. Paynter, 12/04); 1 ♀ (No. 3965), Touws R. (Dr. W. F. Purcell, 9/96); 1 ♀ and sub-adult (No. B 2467), Matjesfontein (Dr. W. F. Purcell, 8/03); 1 ♀ and juv. (No. 8920), Moordenaars Karroo, Sutherland Div. (J. Meiring, 1900); 1 ♀ and juv. (No. 13698), Prince Albert (R. Broom, 1904); 1 ♀ and juv. (No. 3685), Steinkopf, Namaqualand Div. (W. H. Turle, 1/97); 2 sub-adult ♀ ♀ and 1 sub-adult (No. 12862), Laingsburg (Dr. W. F. Purcell and R. M. Lightfoot); 3 ♀ ♀ and 5 juv. (B 1633), Beaufort West (Dr. W. F. Purcell, 24/10/15). Four ♀ ♀ and 6 juv. specimens from Matroosberg at an altitude of 3500–4000 ft. (R. W. Tucker, 15/1/17), offer slight differences from the above description, in that the median plate of the vulva is smaller, more oval, and completely surrounded by the dark raised border; the breadth of the carapace is also slightly greater than the length. These differences, which are also shown in Nos. 13698 and B 2467, do not, however, seem to be markedly specific.

FAMILY UROCTEIDAE.

GEN. UROCTEA, Dufour.

UROCTEA SEPTEMNOTATA, n. sp. (Plate XXIX, fig. 12 A).

Specimens.—Numerous ♀ ♀ taken on the Percy Sladen Trust Expedition to South-West Africa (localities at end) in December, 1915, and January, 1916 (R. W. Tucker, coll.). Types, B 2703.

The specimens, of which 34 were taken, are all ♀ ♀, and range from juveniles to old adults, and all appear referable to one species. This has been described as new, though owing to the diagnoses of other species being based mainly on colour and markings, both *U. quinquenotata* (Sim.) and *U. schinzi* (Sim.) and possibly *U. semilimbata* (Sim.) might be represented by various stages and variations in the specimens to hand. From this material it appears that the testaceous spots are prominent in the young and tend to disappear in the adults; though the range of variation is such that they may be retained in adult forms, and even reinforced by testaceous flecks until the spots are linked in an irregular chain. Also almost melanic varieties occur, the upper abdomen lacking testaceous spots or flecks; the opposite likewise obtains, the abdomen being lighter and more testaceous above, the spots joined together and the under side of the abdomen pale.

The stages represented and presumably explained by the variations and state of maturity of the specimens are as follows:

Juvenile specimens have the abdomen deep black above and ornamented with 7 testaceous spots; 5 are arranged just as in *U. quinquenotata*, with the addition of two extra ones between the median laterals and the terminal central spot. The additional spots may be large, small, occasionally merged or even absent. The next stages, which are most plentifully represented, are probably just adult, and the majority greatly resemble *U. schinzi*, being distinguished therefrom by the vulva and sternum. Some, however, retain the 7 spots, dull and more or less linked when adult; others show 5, 4 and 2 according to the amount of black pigment present; all, however, have the same characters in eyes and vulva, etc., and can hardly be separated specifically.

The large and old adult stages have often all black abdomens above, sometimes with a cinereous tinge; others show traces more or less distinct of the two anterior abdominal spots, which are the largest and clearest in all stages.

The above are possibly only variations of *U. schinzi*, but other specimens in the Museum collection, from Little Namaqualand, are lacking in the brown markings on the vulva, and otherwise agree more closely with the description of *U. schinzi*; hence *U. septemnotata* has been separated as above.

The variable markings of the abdomen are apparently usual in the genus, since *U. indica* (Poc.) recorded from India has occasionally 7 spots.

♀. *Colour.*—Carapace dark brown; sternum pale testaceous with brown border; coxae brown, being the same colour or lighter than the border of sternum.

Posterior border of labium and maxillae dark brown (in *U. schinzi* the brown border to the sternum is not so prominent, and the coxae are the same colour as the sternum itself). Abdomen as described above, and bearing stiff black hairs anteriorly, which curve over abdomen above cephalothorax.

Legs.—Well clothed with hairs and spines, especially the posterior pairs; colour as in *U. schinzi*, but tending often to be dark mahogany in shade.

Vulva.—Seen in spirits, its characteristic form is as in fig. 12 A; exceptions, however, occur in which the 2 lateral marks are closer together and coalesce, or are joined by a dark band. The specimens were taken with other normal ones, and the variations seem due to the internal arrangement of the vesicula seminalis showing through the vulval plates in a slightly different fashion.

Measurements.—Length of adults 11–12 mm. Legs vary between 13 and 14 mm. in length.

Localities.—Goas (Nautseras Noab), 5 ♀ ♀; Usib R., 8 km. from Nomptsas, 7 ♀ ♀; Voigtsgrund, 6 ♀ ♀ and 2 juv.; Maltahohe, 2 ♀ ♀ and juv.; Kabiras, juv. ♀; entrance to Bull's Mouth Pass, 5 ♀ ♀; Tsais, Bull's Mouth Pass, 2 ♀ ♀; Ababis, 3 ♀ ♀. S.W. Afric. Prot.

UROCTEA QUINQUENOTATA, Sim. (Plate XXIX, fig. 12 B).

1910. *U. quinquenotata*, Simon, in Schultzes Forsch-reise Zool. Jena, vol. 16, p. 189. ♀.

Specimens.—2 ♀ ♀ and 1 ♀ juv. (No. 3865); locality not stated, but probably Bushmanland.

These specimens agree in markings of abdomen, etc., with description of *U. quinquenotata*. The sternum is slightly dark edged, and is unicolorous with the coxae and femora, the latter being light brown below.

The vulva is distinct, as in fig. 12 B. Simon gives no figures of the vulva of *quinquenotata*, and although the above specimens are considered to agree with Simon's description, they may prove to be a distinct species.

UROCTEA SCHINZI, Sim.

1887. *U. schinzi*, Sim., Ann. Soc. Ent. Fr. (6) vol. 7, p. 370. ♀.
1893. ,, ,, Sim., Araign. 2nd ed., vol. 1, p. 451. ♀.
1910. ,, ,, Sim., in Schultzes Forsch.-reise Zool. Jena, vol. 16, p. 188. ♀.

Specimens.—4 ♀ ♀, 1 juv. ♂ and 1 juv. ♀ (No. 3717) from Namies (Kenhardt Div.), Bushmanland (M. Schlechter, 3 1898).

Compared with *U. septemnotata* the ♀ ♀ have the vulval cleft narrower and the entire genital surface more wrinkled and lacking in the lateral brown markings; the juvenile specimens have black abdomens with 5 light conspicuous spots; terminal one angular, and with 2 spots anteriorly and 1 posteriorly to the latter; carapace, legs and sternum light yellow. They may possibly be the juveniles of a different species although they occur with the above, since the abdominal markings are very distinct.

1 ♀ (B 711, R. M. Lightfoot, 10/1911) from Jackals' Water, Little Namaqualand, shows traces of 7 spots on a cinereous abdomen but

has the vulva as in *U. schinzi.* 2 ♀ ♀ (Nos. 3700 and 3703) from Naroep, Bushmanland, agree with *U. schinzi*; also 1 ♀ (No. 3712) from Henkries, Bushmanland; and 1 ♀ (No. 3721) from Eitries, Bushmanland; all latter collected by M. Schlechter, 1–3/98.

FAMILY CLUBIONIDAE.

SUBFAMILY CORINNINAE.

GEN. CETO, Sim.

CETO CURVIPES, n. sp (Plate XXIX, fig. 18 A–B).

Specimens.—One ♂ (No. B 2742, Type); Gt. Winterhoek Mts., Cape, altitude 4200–4700 ft. (R. W. Tucker, 19/11/16).

Colour.—Cephalothorax pale brown, redder anteriorly; legs and abdomen pale testaceous, latter infuscated posteriorly around and above the spinners; dorsal surface covered with a scutum of the same colour as the posterior carapace. Sternum very pale brown; coxae pallid; chelicera dark brown.

Carapace.—Oval, broadest opposite 2nd pair of legs, and gradually narrowing posteriorly to them, and forming an almost rectangular ocular portion anterior to the 1st pair of legs. Clypeus narrow, not as wide as the anterior laterals. Surface moderately convex, glabrous, but minutely punctate; cephalic portion only very slightly higher than the thoracic; latter portion sloping shortly but at a moderate angle posteriorly. Thoracic stria moderately long.

Eyes.—From above, the anterior row appears slightly recurved; medians larger than the laterals, and less than ½ a diameter apart; laterals nearer to medians. Posterior row strongly recurved, and wider than the anterior row; median eyes slightly more than a diameter apart, median area nearly as long as wide and slightly wider posteriorly; posterior lateral equidistant from the medians, and facing backwards and sideways. Seen from in front the anterior row appears slightly procurved, and the posterior row straight.

Abdomen.—About the same length as the carapace, and much narrower: slightly broader posteriorly; covered with a scutum over the entire length dorsally, and with an epigastric scutum ventrally.

Spinners.—Inferior spinners short, and subcylindrical; superior spinners about equal in size, and slightly more posterior in position.

Sternum.—Marked with a line parallel to the border; smooth, broad, and shield-shaped; not produced anteriorly, but extending to the posterior border of coxa IV; not truncated.

Labium.—Longer than broad and extending over ½ way up the coxae of the pedipalps, which incline inwards slightly over its apex.

Coxae.—Coxa I longer than coxa IV; coxae of pedipalps with a tuft of stout hairs apically.

Chelicera.—Stout; fangs moderately long, grooves apparently muticous.

Palpi.—Femur straight, moderately long; tibia spined as in fig. 18 B; tarsus elongated, surpassing tarsal organ; latter with an external process as in fig. 18 A. Patella also spined.

Legs.—In order of length 1, 4, 2, 3. Tarsus I straight, cylindrical in shape, and slightly broader anteriorly; very sparse fine or scopular hairs, together with a row of numerous small spines down each side of the under surface; claws very short and hidden by short fascicles. Metatarsus about ⅓ longer than the tarsus; no scopula, but with about 14–15 pairs of small spinules, and 1–2 spines on the under surface; tibia with 4 long spines on the under surface; patella and femur muticous. Tarsus and metatarsus II similar to I, but shorter and with less numerous spinules (10–11 pairs on the metatarsus); tibia with 4–5 strong spines on the anterior border of the under surface, and 3–4 distally on the posterior border. Tarsus III short and curved upwards in the centre and hinder portion; well clothed with fine to stout bristles on the under surface; claws about as long as the fascicles, and bearing 1–2 teeth; metatarsus long, about 2⅓ times as long as the tarsus, slightly swollen distally and with an apical patch of coarse scopular hairs on the under surface; the metatarsus also appears slightly curved, and bears 1 spine on the anterior surface and 3 on the lower posterior surface; tibia and femur bear a few spines. Tarsus IV also curved similar to III; bristles on the lower surface longer; metatarsus very long, about 3 times as long as the tarsus; also narrowing anteriorly and then slightly swelling distally, and bearing a small patch of coarse scopula on the under surface, and 3–4 apical, and 3–4 other spines; tibia also with 3–4 spines; patella muticous; femur with 1–2 spines. Femur I is much shorter than femur IV.

Measurements.—Carapace 2·3 mm. in length. Total length 5 mm.

SUBFAMILY LIOCRANEAE.

GEN. RHAEBOCTESIS, Sim.

The following species of this genus appear related also to the *Drassidae*, in that the carapace and mouth-parts resemble those of *Theuma*.

the claws those of *Anagraphis*, whilst the median spinners, as noted by Simon (Hist. Nat. des Araign. 2nd ed., 1897, p. 136), closely resemble those of *Rebilus*.

RHAEBOCTESIS TRINOTATUS, n. sp. (Plate XXVIII, fig. 7).

Specimens.—1 ♀ (B 3253, Type), Salisbury, S. Rhodesia (R. W. Tucker, 4/17). 2 ♀ ♀ (B 4486), Florida, Transvaal High Veld (R. W. Tucker, 12/18).

Colour.—Carapace dark brown; legs slightly lighter; tarsus IV with median light band; dorsal surface of abdomen cinereous black, under surface lighter; sternum median brown, coxae lighter.

Carapace.—Width across the ocular area just over ½ the greatest width; surface clothed with fine dark appressed hairs. Clypeus much narrower than the diameter of an anterior lateral eye.

Maxillae.—Resembling those of *Drassidae*, particularly *Theuma*.

Eyes.—Seen from above the anterior row is straight to slightly recurved; lateral eyes slightly larger than the medians; medians almost touching the laterals, but slightly more distant from each other. Posterior row straight and wider than the anterior row; laterals larger than the medians, and about the same size as the anterior laterals; medians oblique, pearly, and subangular, and nearer to each other than to the laterals.

Median ocular area wider posteriorly and slightly longer than wide.

Sternum.—Broad oval, slightly longer than broad.

Legs.—In order of length 4, 1, 2, 3. Tarsus and metatarus of 1st leg scopulate to base; also scopular hairs anteriorly on inner side of the tibia. Tarsus II scopulate; metatarsus less densely so; metatarsus I with 1 basal spine, II with 2 basal spines; tarsus III with scopula of bristly hairs, metatarsus with only a few scopular hairs. Tarsus IV with a coarser scopula, metatarsus with bristly hairs, especially anteriorly on the under surface. Tarsi not spined. Posterior legs more heavily spined than the anterior.

Pedipalps.—Tibia longer than patella; tarsus slender and bearing apical toothed claw.

Chelicera.—Bearing "tache basale"; inferior border of groove with 2 strong teeth, superior border with 3.

Abdomen.—Lung opercula distinct and well marked; also a trace of a ventral tracheal stigma anterior to the spinners.

Spinners.—As in Text-fig. 142, p. 137, Hist. Nat. des Araign., 2nd ed.

Vulva.—As in figure; 2 distinct lateral cavities and 3 small hooded pockets.

Measurements.—Carapace 2·75 mm. in length; total length 7 mm.

RHAEBOCTESIS SECUNDUS, n. sp. (Plate XXVIII, fig. 11 A–B).

Specimens.—2 ♂ ♂ and 2 ♀ ♀ (9482, Types), Hanover (S. C. Cronwright Schreiner, 9–10/01); also 4 ♀ ♀ and 1 ♂ from the same and neighbouring localities (*id.*, 10/01–3/02).

♀. *Colour.*—Carapace medium brown, with darker radiations from a prominent median stria; cephalic portion slightly darker and redder; chelicera reddish-brown; legs, coxae and sternum golden-brown; abdomen testaceous.

Carapace.—Width across the posterior row of eyes $\frac{1}{2}$ the greatest width; surface clothed with appressed golden hairs. Clypeus narrower than the diameter of an anterior lateral eye.

Eyes.—Anterior row straight when seen from in front; slightly recurved from above; medians subequal to the laterals and slightly nearer to them than to each other. Posterior row much wider than the anterior and slightly recurved; medians flat, subangular and nearer to each other than to the laterals. Median ocular area longer than wide, and scarcely wider posteriorly.

Chelicera.—As in *R. trinotatus.*

Sternum.—$1\frac{1}{3}$ times as long as broad.

Legs.—Tarsi and metatarsi I and II densely scopulated; metatarsus I with 1 median and 2 basal spines on the under surface; metatarsus with the median spine sometimes absent. Metatarsus III with a scopula of bristly hairs. Metatarsus IV clothed with bristles on the lower surface, and bearing sparse white plumose hairs on the sides, especially on a lighter median band.

Pedipalps.—As in *R. trinotatus.*

Abdomen.—Ventral tracheal stigmata indistinct; spinners as in *R. trinotatus.*

Vulva.—As in fig. 11 A.

♂. *Colour.*—Slightly lighter than the ♀.

Carapace.—Width across the posterior row of eyes $\frac{1}{2}$ the greatest width; clypeus less than $\frac{1}{2}$ the diameter of an anterior lateral eye.

Eyes.—Seen from in front the anterior row is straight; the laterals are larger than the medians and touching them; medians less than $\frac{1}{2}$ a diameter apart. Posterior row straight, otherwise as in ♀. Median ocular area only very slightly longer than wide and narrower anteriorly.

Chelicera.—As in ♀, but longer and therefore having the teeth more widely separated.

Sternum.—As in ♀.

Legs.—Tarsus I scopulated, metatarsus scopulate anteriorly and bearing a median and 2 basal long stout spines; similarly with the tarsus and metatarsus of the 2nd leg, but the metatarsus bears 2 median as well as 2 basal spines. Tarsi III and IV with bristles on the under surface and each with an anterior to median whitish band; all the tarsi are slender, especially IV and I; metatarsus IV 2¼ times the length of the tarsus.

Pedipalp.—Tibia slightly longer than the patella, bearing on its outer surface a median cluster of spiniform bristles and a short curved apical projection, and on the inner surface 4 long spines and numerous long stout bristles. Tarsus and palpal organ as in fig. 11 B.

Spinners.—Superior spinners more cylindrical than in the ♀; median spinners shorter and more slender and not compressed as in the ♀; superior spinners cylindrical but not so stout as the inferiors.

Measurements.—Length of carapace, ♀ 4·9 mm; ♂ 3·5 mm. Total length, ♀ 12·3 mm., ♂ 7·6 mm.

RHAEBOCTESIS TRANSVAALENSIS, n. sp. (Plate XXVIII, fig. 10 A–B).

Specimens.—4 ♀ ♀ and 2 ♂ ♂ (B 1487, Types.) Florida, Transvaal, High Veld (R. W. Tucker, 12/18).

♀. *Colour.*—Carapace medium brown, redder and darker anteriorly, and with slight radiate infuscation; legs similar in colour, becoming darker distally, tarsus with the trace of a pale median band. Abdomen infuscated dorsally, pale ventrally.

Carapace.—As in *R. trinotatus*; clypeus less than the radius of an anterior lateral eye.

Eyes.—As in *R. trinotatus.*

Chelicera, pedipalps, etc., also as in *R. trinotatus.*

Legs.—Tarsus I scopulate and spineless; metatarsus scopulate to the base and bearing 2 basal spines; tibia with a few scopular hairs anteriorly; 2nd leg similar, tibia with fewer scopular hairs. Tarsus III clothed with bristles on the under surface; metatarsus bearing a few bristles and numerous long spines.

Abdomen, spinners, etc., as in *R. trinotatus.*

Vulva, etc., as in fig. 10 A.

♂. *Colour.*—Slightly lighter than the ♀.

Other characters as in the description of the ♂ of *R. secundus.*

Legs.—Metatarsus I with 2 median and 2 basal spines; 2nd leg similar; scopular hairs more bristle-like than in the ♀; otherwise as in *R. secundus.*

Pedipalps.—Tarsus and palpal organ as in fig. 10 B.

Measurements.—Length of carapace ♀ 3·9, ♂ 3 mm.; total length ♀ 9·4 mm., ♂ 6·1 mm. These specimens and the 2 examples of

R. trinotatus taken at the same time and locality strongly resemble the genus *Xerophaeus* Fam. *Drassidae* in their appearance and movements when alive; also they were taken from the same habitat as specimens of *Xerophaeus*, from which, at the time, they were indistinguishable.

RHAEBOCTESIS EXILIS, n. sp. (Plate XXVIII, fig. 9).

Specimens.—1 ♂ (B 4476, Type), Messina, N. Transvaal (R. W. Tucker, 12/18).

Colour.—Carapace medium brown with fairly strong infuscated mottling, especially laterally; legs lighter in colour, strongly infuscated proximally, and becoming slightly redder distally. Abdomen greyish-black on the dorsal surface; ventral surface pale with bright brown epiginal plate.

Carapace, eyes, etc., as in *R. secundus*; eyes differ slightly in that anterior row is somewhat procurved, and median ocular area is noticeably longer than wide.

Maxillae.—Strongly resembling those of *Drassidae*; oblique impression, however, does not reach to the outer border.

Legs.—Tarsus I lightly scopulate; metatarsus I with scopular hairs anteriorly, and with 1–2 median and 2 basal spines; 2nd leg similar, with 0–2 median and 2 basal spines. Tarsus III bearing bristles on the under surface; no median white band present. Fourth legs missing.

Pedipalps.—Tibial spine short, stout, and curved upwards and inwards. Palpal organ as in fig. 9.

Measurements.—Carapace 2·8 mm. in length; total length 5·5 mm.

RHAEBOCTESIS MATROOSBERGENSIS, n. sp. (Plate XXVIII, fig. 8).

Specimens.—1 ♀ (B 3456, Type), Matroosberg Mts., C.P., 5000–6000 ft. (R. W. Tucker, 11/17).

Colour.—Carapace light brown, darker anteriorly; chelicera reddish-brown; legs light brown. Abdomen dull grey dorsally and ventrally sternum light brown, dark edged.

Eyes.—Front row straight to recurved; medians about a diameter apart, but less so from the larger laterals. Posterior row very slightly recurved, medians angular and subequal to the laterals; laterals subequal to the anterior laterals. Clypeus not exceeding the diameter of an anterior median eye.

Chelicera.—As in *R. trinotatus*.

Legs.—Metatarsus I scopulate laterally almost to the base, and with 2 median and 2 basal spines on the under surface; tibia with no scopular hairs, 2 median and 1 basal spines. Metatarsus IV bearing bristles in place of scopular hairs, and with the usual pale band centrally.

Vulva.—As in figure.

Measurements.—Length of carapace 4 mm.; total length 10 mm.

CORRECTIONS.

In the paper on South African Arachnida (I), Ann. S. African Museum, vol. 17, pt. 2, the following alterations in specific names should be made:

Moggridgea latus, n. sp., p. 81, to *M. lata*.

Hermacha fulvus, n. sp., p. 109, to *H. fulva*.

Hermacha nigrispinosis, n. sp., p. 112, to *H. nigrispinosa*.

The type of *Hermacha purcelli*, n. sp., p. 114, should be No. B 2610 instead of B 2670, and that of *H. nigrispinosa*, p. 112, B 2983 instead of B 2593.

The specimens identified as *Thelechoris australis* (p. 120) are now *Allothele caffer* (p. 442); also in the description of the same (p. 120, line 25) read "procurved" for "recurved."

Also on p. 126, line 3, read form (*c*) for form (*e*).

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EXPLANATION OF PLATES XXVIII AND XXIX.

PLATE XXVIII.

FIG.

1.—*Allothele teretis*, n. sp. A and B. Pedipalp and papal organ of ♂. C. Tibia and metatarsus of 2nd leg of ♂.
2.—*Adonea parva*, n. sp. Palp of ♂, ventral surface.
3.—*Diores auricula*, n. sp. Vulva of ♀.
4.—*Diores druryi*, n. sp. Vulva of ♀.
5.—*Diores capensis*, n. sp. Palp of ♂, ventral surface.
6.—*Diores jonesi*, n. sp. A. Vulva of ♀. B. Palp of ♂, ventral surface.
7.—*Rhaeboctesis trinotatus*, n. sp. Vulva of ♀.
8.—*Rhaeboctesis matroosbergensis*, n. sp. Vulva of ♀.
9.—*Rhaeboctesis exilis*, n. sp. Palp of ♂ from ventral surface.
10.—*Rhaeboctesis transvaalensis*, n. sp. A. Vulva ♀. B. Palp ♂.
11.—*Rhaeboctesis secundus*, n. sp. A. Vulva ♀. B. Palp ♂.

PLATE XXIX.

FIG.

1.—*Eresus purcelli*, n. sp. Vulva of ♀.
2.—*Eresus depressus*, n. sp. A. Vulva of ♀. B. Profile of ♀ carapace. C. Ditto, *E. fumosus*.
3.—*Eresus fumosus*. Palp of ♂, ventral surface.
4.—*Dresserus colsoni*, n. sp. Vulva of ♀.
5.—*Dresserus kannemeyeri*, n. sp. A. Palp of ♂, ventral surface. B. Cribellum ♂. C. Vulva of ♀.
6.—*Dresserus nigellus*, n. sp. Vulva of ♀.
7.—*Dresserus schreineri*, n. sp. A. Palp of ♂, ventral surface. B. Profile of ♂ carapace. C. Ditto of *D. kannemeyeri*.
8.—*Dresserus sericatus*, n. sp. Vulva of ♀.
9.—*Hersiliola australis*. Palp of ♂, lateral view of under surface.
10.—*Hersilia bicornis*, n. sp. A. Vulva of ♀. B. Palp of ♂, lateral view.
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12A.—*Uroctea septemnotata*, n. sp. Vulva of ♀.
12B.—*Uroctea quinquenotata*, n. sp. Vulva of ♀.
13.—*Diores bifurcata*, n. sp. A. Eyes. B. Vulva of ♀. C. Tibia of ♂ palp. D. Palp of ♂, lateral ventral view. E. Chelicera and anterior carapace.
14.—*Diores poweri*, n. sp. A. Mouth parts. B. Fang of chelicera. C. Eyes. D. Vulva of ♀.
15.—*Diores salisburyensis*, n. sp. A. Palp of ♂, ventral view. B. Ditto, dorsal view.
16.—*Diores salisburyensis*, n. sp. Vulva of ♀.
17.—*Diores setosus*, n. sp. Vulva of ♀.
18.—*Ceto curvipes*, n. sp. A. Palp of ♂, ventral view. B. Patella and tibia of ♂ palp.